



MILITARY AND AEROSPACE Applications

Military- and Space-Qualified Passive Components Selector Guide

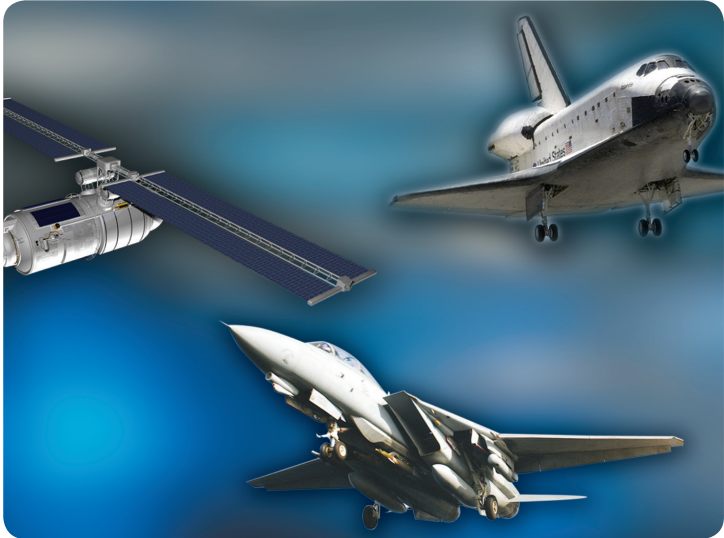


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Introduction

Vishay's line of high-reliability products reflects a long-term commitment to our military and aerospace customers. As one of the largest suppliers of military components, we continually strive to meet the changing application requirements of the defense market by developing new products and manufacturing technologies on an ongoing basis.

Vishay has one of the broadest lines of military-qualified resistors, capacitors, and inductors in the industry, and our high-reliability devices can be found in nearly every existing military and aerospace program, including aircraft, satellites, missiles, weapons, ground vehicles, and ships. Our precision potentiometers have been used for over 20 years in three different missile programs and are also used in passenger jets.

Able to meet the most demanding application specifications, our high-reliability products are qualified to the relevant CECC, EN, ESCC or MIL specifications. For example, our high-reliability inductors are qualified to MIL-T-27E, MIL-C- 15305E, and MIL-C-39010D specifications. Our high-reliability resistive components are qualified to ESCC 4001/022, MIL-PRF-39007, MIL-PRF-39009, MIL-PRF-39017, MIL-PRF 55182, MIL-PRF-55342, MIL-PRF-83401, and many other high-reliability specifications. Our high-reliability capacitors are qualified to MIL-PRF-39003, MIL-PRF-39006, MIL-PRF-55365, MIL-PRF-123, and MIL-PRF-55681.





In addition to standard military-grade products, Vishay is equipped to design and produce custom components to meet any design and reliability demands. Our MLCC capacitor group offers products to source-controlled specifications with customer specific requirements such as capacitance tolerances. Our custom magnetic group produces many custom inductors and transformers for applications as diverse as missile systems and groundbased communications systems. And our resistor groups produce many resistive products designed to meet various military source-controlled drawings.

Every component Vishay provides to the military and aerospace markets is backed by the comprehensive testing and failure analysis capabilities of our own technical staff, who are experts in understanding and meeting the requirements of the military environment. Our technical expertise, our knowledge of the military and aerospace industries, our broad product offering, and our ability to work long-term are all part of Vishay's ongoing commitment to meeting the changing requirements of our most reliability-conscious customers, today and in the future.



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Resistors

Component	Series/Part Number	Features/Benefits	Qualification	Qualified Value Range	TCR	Power Rating
Thin Film Precision Resistors	M55342 QPL	<ul style="list-style-type: none"> Chip resistor established reliability Low TCR (25 ppm/°C) Tight tolerance (0.1 %) 	M 55342/1 through /12 D55342/7	10 Ω to 3 MΩ	25, 50, and 100 ppm/°C	10 mW to 1 W
	PTN	<ul style="list-style-type: none"> DSCC listed Moisture-resistant wrap-around chip resistors Low TCR (25 ppm/°C) Tight tolerance (0.1 %) 	94012, 94013, 94014, 94015, 94016, 94017, 94018, 94019, 94025, 94026, 04008, 04009	10 Ω to 3 MΩ	25, 50, and 100 ppm/°C	10 mW to 1 W
	L1206	<ul style="list-style-type: none"> DSCC listed Low ohmic values Power rating 250 mW at + 70 °C 	02008	1 Ω to 10 Ω	200 and 300 ppm/°C	250 mW
	M1206	<ul style="list-style-type: none"> DSCC listed Ohmic values 10 Ω – 10 MΩ Power rating 250 mW at + 70 °C 	02008	10 Ω to 10 MΩ	200 and 400 ppm/°C	250 mW
	PFR	<ul style="list-style-type: none"> R failure rate chip resistor 0603 / 0805 / 1206 / 2010 Very low TCR: 10 ppm/°C, 25 ppm/°C Tight tolerances of 0.05 % and 0.1 % ESA qualification ongoing 	ESCC 4001/023 Variants 09 to 12 	100 R to 1 M depending on size	10 and 25 ppm/°C	100 mW to 500 mW
	PHR	<ul style="list-style-type: none"> High reliability chip resistor 0603 / 0805 / 1206 / 2010 Very low TCR: 5 ppm/°C, 10 ppm/°C, 25 ppm/°C Very tight tolerance: 0.01 % to 0.1 % ESA-qualified 	ESCC 4001/023 Variants 01 to 08 	100 R to 1 M depending on size	5, 10, and 25 ppm/°C	100 mW to 500 mW
	PRAHR	<ul style="list-style-type: none"> High reliability chip arrays Very low TCR: 10 ppm/°C absolute / 3 ppm/°C ratio Tight tolerance: 0.1 % absolute / 0.05 % ratio 3 sizes 100/135/182 2 to 8 resistors ESA-qualified Custom network qualified (CNW) 	ESCC 4001/025 Variants 01 to 32 	100 R to 1 M depending on size	10 ppm/°C Abs 3 ppm/°C Ratio	100 mW per resistor
	RV	<ul style="list-style-type: none"> In lot tracking to 5 ppm/°C Tolerance 0.1 % to 5 % 0603 / 0805 / 1206 Stability 0.05 % at Pn 1000 hours 	CECC 40401-010 	100 R to 1 M depending on size	10 and 25 ppm/°C	125 mW to 330 mW



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Component	Series/Part Number	Features/Benefits	Qualification	Qualified Value Range	TCR	Power Rating
Axial Leaded Thin Film Resistors	MBA/SMA 0204 VG06	<ul style="list-style-type: none"> Axial leaded thin film resistors 50 ppm/K / $\pm 1\%$: E96 values; 15 ppm/K / $\pm 0.1\%$: E192 values 	CECC 40101-806 	1.0 Ω to 5.11 M Ω ; 100 Ω to 221 k Ω ; 0 Ω	50 ppm/K / $\pm 1\%$; 15 ppm/K / $\pm 0.1\%$; —	0.4 W; 3.0 A
	MBB/SMA 0207 VG06	<ul style="list-style-type: none"> Assessment level EZ, Version E: Established reliability, failure rate level E7 		1.0 Ω to 10.0 M Ω ; 100 Ω to 499 k Ω ; 0 Ω	50 ppm/K / $\pm 1\%$; 15 ppm/K / $\pm 0.1\%$; —	0.6 W; 5.0 A
	MBE/SMA 0414 VG06	<ul style="list-style-type: none"> Approval registered at IECQ Series includes zero-ohm jumper 		1.0 Ω to 21.5 M Ω ; 100 Ω to 470 k Ω	50 ppm/K / $\pm 1\%$; 15 ppm/K / $\pm 0.1\%$	1.0 W
	MBA/SMA 0204	<ul style="list-style-type: none"> Axial leaded thin film resistors Tolerances 0.1%, 0.25 %, 0.5 %, 1 %, and 5 % 	CECC 40101-806 	0.22 Ω to 10.0 M Ω ; 0 Ω	15, 25, and 50 ppm/K; —	0.4 W; 3.0 A
	MBB/SMA 0207	<ul style="list-style-type: none"> Professional and precision specifications Series include zero-ohm jumpers 		0.22 Ω to 22.0 M Ω ; 0 Ω	15, 25, and 50 ppm/K; —	0.6 W; 5.0 A
	MBE/SMA 0414	<ul style="list-style-type: none"> Assessment level EZ, Version A Approval registered at IECQ 		0.22 Ω to 22.0 M Ω	15, 25, and 50 ppm/K	1.0 W
Thin Film MELF Resistors	MS1 ESCC	<ul style="list-style-type: none"> Thin film MELF resistors Tolerances 0.1 %, 0.5 %, and 1 % Approval listed in the ESCC QPL 	ESCC 4001/022 	10.0 Ω to 5.11 M Ω	15, 25, and 50 ppm/K	0.25 W
	MMU 0102 VG03	<ul style="list-style-type: none"> Thin film MELF resistors 50 ppm/K / $\pm 1\%$: E96 values; 15 ppm/K / $\pm 0.1\%$: E192 values 	CECC / EN 140401- 803 	100 Ω to 2.21 M Ω ; 100 Ω to 100 k Ω ; 0 Ω	50 ppm/K / $\pm 1\%$; 15 ppm/K / $\pm 0.1\%$; —	0.2 W; 2.0 A
	MMA 0204 VG03	<ul style="list-style-type: none"> Series include zero-ohm jumpers Assessment level EZ, Version E: established reliability, failure rate level E6 		1.0 Ω to 5.11 M Ω ; 75.0 Ω to 100 k Ω ; 0 Ω	50 ppm/K / $\pm 1\%$; 15 ppm/K / $\pm 0.1\%$; —	0.25 W; 3.0 A
	MMB 0207 VG03	<ul style="list-style-type: none"> Approval registered at IECQ 		1.0 Ω to 10.0 M Ω ; 75.0 Ω to 499 k Ω ; 0 Ω	50 ppm/K / $\pm 1\%$; 15 ppm/K / $\pm 0.1\%$; —	0.4 W; 5.0 A
	MS1.... EN803 E8	<ul style="list-style-type: none"> Thin film MELF resistors 50 ppm/K / $\pm 1\%$: E96 values; 15 ppm/K / $\pm 0.1\%$: E192 values Lead-bearing with SnPb termination plating Assessment level EZ, Version E: established reliability, failure rate level E8 Approval registered at IECQ 	CECC / EN 140401-803 	10.0 Ω to 2.21 M Ω ; 75.0 Ω to 100 k Ω	50 ppm/K / $\pm 1\%$; 15 ppm/K / $\pm 0.1\%$	0.25 W
	SMM0204 EN803 E8	<ul style="list-style-type: none"> Thin film MELF resistors 50 ppm/K / $\pm 1\%$: E96 values; 15 ppm/K / $\pm 0.1\%$: E192 values Lead-free and RoHS compliant Assessment level EZ, Version E: established reliability, failure rate level E8 Approval registered at IECQ 	CECC / EN 140401-803 	10.0 Ω to 2.21 M Ω ; 75.0 Ω to 100 k Ω	50 ppm/K / $\pm 1\%$; 15 ppm/K / $\pm 0.1\%$	0.25 W



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Component	Series/Part Number	Features/Benefits	Qualification	Qualified Value Range	TCR	Power Rating
Thin Film MELF Resistors	MMU 0102 Professional Precision	<ul style="list-style-type: none"> Thin film MELF resistors Tolerances 0.1 %, 0.25 %, 0.5 %, and 1 % 	CECC / EN 140401-803 	0.22 Ω to 2.21 MΩ; 0 Ω	15, 25, and 50 ppm/K; —	0.2 W; 2.0 A
	MMA 0204 Professional Precision	<ul style="list-style-type: none"> Professional and precision specifications Series include zero-ohm jumpers 	CECC / EN 140401-803 	0.22 Ω to 10.0 MΩ; 0 Ω	15, 25, and 50 ppm/K; —	0.25 W; 3.0 A
	MMB 0207 Professional Precision	<ul style="list-style-type: none"> Assessment level EZ, Version A Approval registered at IECQ 		0.22 Ω to 15.0 MΩ; 0 Ω	15, 25, and 50 ppm/K; —	0.4 W; 5.0 A
	MMA 0204 HT	<ul style="list-style-type: none"> Thin film MELF resistors Tolerance 0.5 % and 1 % Extended temperature range Professional specifications Assessment level EZ, Version A Approval registered at IECQ 		47 Ω to 100 kΩ	25 and 50 ppm/K	0.5 W
	UMA 0204	<ul style="list-style-type: none"> Thin film MELF resistors Tolerances 0.1 % and 0.25 % High precision specifications Assessment level EZ, Version A Approval registered at IECQ 	CECC / EN 140401-803 	22.0 Ω to 332 kΩ	10 ppm/K	0.25 W
	SMM0204 EN803 E0	<ul style="list-style-type: none"> Thin film MELF resistors Tolerances 0.1 %, 0.25 %, 0.5 %, and 1 % Assessment level EZ, Version A Approval registered at IECQ 	CECC / EN 140401-803 	1.0 Ω to 2.2 MΩ	15, 25, and 50 ppm/K	0.25 W
	OMM0204 EN803 E0	<ul style="list-style-type: none"> MELF zero-ohm jumper Assessment level EZ, Version A Approval registered at IECQ 	CECC / EN 140401-803 	0 Ω	—	2.0 A
Thin Film Chip Resistors	TNPS 0603 ESCC	<ul style="list-style-type: none"> Thin film chip resistors Tolerances 0.1 %, 0.5 %, and 1 % Product listed in the EPPL Approval listed in the ESCC QPL 	ESCC 4001/029 	10.0 Ω to 221 kΩ	15, 25, and 50 ppm/K	0.1 W
	TNPS 0805 ESCC			10.0 Ω to 422 kΩ	15, 25, and 50 ppm/K	0.125 W
	TNPS 1206 ESCC			10.0 Ω to 1.0 MΩ	15, 25, and 50 ppm/K	0.25 W
	MCS 0402 VG01	<ul style="list-style-type: none"> Thin film chip resistors Tolerances 0.1 % and 1 % 50 ppm/K / ± 1 %: E96 values; 15 ppm/K / ± 0.1 %: E192 values Series include zero-ohm jumpers Assessment level EZ, Version E: established reliability, failure rate level E6 Approval registered at IECQ 	CECC / EN 140401-801 	100 Ω to 100 kΩ; 100 Ω to 33.2 kΩ; 0 Ω	50 ppm/K / ± 1 %; 15 ppm/K / ± 0.1 %; —	0.063 W; 0.63 A
	MCT 0603 VG01			10.0 Ω to 1.0 MΩ; 100 Ω to 47.5 kΩ; 0 Ω	50 ppm/K / ± 1 %; 15 ppm/K / ± 0.1 %; —	0.1 W; 1.0 A
	MCU 0805 VG01			1.0 Ω to 1.0 MΩ; 100 Ω to 100 kΩ; 0 Ω	50 ppm/K / ± 1 %; 15 ppm/K / ± 0.1 %; —	0.125 W; 1.5 A
	MCA 1206 VG01			1.0 Ω to 10 MΩ; 43 Ω to 332 kΩ; 0 Ω	50 ppm/K / ± 1 %; 15 ppm/K / ± 0.1 %; —	0.25 W; 2.0 A



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Component	Series/Part Number	Features/Benefits	Qualification	Qualified Value Range	TCR	Power Rating
Thin Film Chip Resistors	MCS 0402 Professional Precision	<ul style="list-style-type: none"> Thin film chip resistors Tolerances 0.1 %, 0.25 %, 0.5 %, and 1 % 	CECC / EN 140401-801 	10.0 Ω to 1.0 M Ω ; 0 Ω	10, 15, 25, and 50 ppm/K –	0.063 W; 0.63 A
	MCT 0603 Professional Precision	<ul style="list-style-type: none"> Professional and precision specifications Series include zero-ohm jumpers 		10.0 Ω to 1.0 M Ω ; 0 Ω	10, 15, 25, and 50 ppm/K –	0.1 W; 1.0 A
	MCU 0805 Professional Precision	<ul style="list-style-type: none"> Assessment level EZ, Version A Approval registered at IECQ 		10.0 Ω to 1.0 M Ω ; 0 Ω	10, 15, 25, and 50 ppm/K –	0.125 W; 1.5 A
	MCA 1206 Professional Precision			10.0 Ω to 1.0 M Ω ; 0 Ω	10, 15, 25, and 50 ppm/K –	0.25 W; 2.0 A
	MCS 0402 AT Professional Precision	<ul style="list-style-type: none"> Thin film chip resistors Tolerances 0.1 %, 0.5 %, and 1 % 	CECC / EN 140401-801 	47 Ω to 47 k Ω ; 0 Ω	15, 25, and 50 ppm/K; –	0.4 W; 0.63 A
	MCT 0603 AT Professional Precision	<ul style="list-style-type: none"> Extended temperature range Professional and precision specification Series include zero Ohm jumpers 		47 Ω to 100 k Ω ; 0 Ω	15, 25, and 50 ppm/K; –	0.15 W; 1 A
	MCU 0805 AT Professional Precision	<ul style="list-style-type: none"> Assessment level EZ, Version A Approval registered at IECQ 		47 Ω to 100 k Ω ; 0 Ω	15, 25, and 50 ppm/K; –	0.2 W; 1.5 A
	MCA 1206 AT Professional Precision			47 Ω to 100 k Ω ; 0 Ω	15, 25, and 50 ppm/K; –	0.4 W; 2 A
Thick Film Chip Resistors	CHPHR	<ul style="list-style-type: none"> Thick film chip resistor 0603 / 0805 / 1206 / 2010 / 2512 Tolerances: 1 % / 2 % / 5% ESA qualified 	ESCC 4001/026 	1 R to 10 M	100 ppm/ $^{\circ}$ C 200 ppm/ $^{\circ}$ C	100 mW to 800 mW
Axial Vitreous Wirewound Resistors	FDG	<ul style="list-style-type: none"> Axial leaded wirewound resistors with vitreous coating TCR +100 to +180 ppm/K Tolerance ± 5 %: E12 values; Tolerance ± 2 %: E24 values Assessment level S, Version A Approval registered at IECQ 	CECC 40 201-801 	0.10 Ω to 10 k Ω	+ 180 ppm/K / ± 5 % + 180 ppm/K / ± 2 %	3.0 W
	FDK			0.10 Ω to 39 k Ω 0.10 Ω to 22 k Ω	+ 180 ppm/K / ± 5 % + 180 ppm/K / ± 2 %	5.5 W
	FDP			0.15 Ω to 68 k Ω 0.15 Ω to 33 k Ω	+ 180 ppm/K / ± 5 % + 180 ppm/K / ± 2 %	10.0 W
	FDG	<ul style="list-style-type: none"> Axial leaded wirewound resistors with vitreous coating TCR +100 to +180 ppm/K Tolerance ± 5 %: E12 values; Tolerance ± 2 %: E24 values Assessment level S, Version E: established reliability, failure rate level E7 Approval registered at IECQ 	CECC 40 201-801 	0.10 Ω to 10 k Ω	+ 180 ppm/K / ± 5 % + 180 ppm/K / ± 2 %	3.0 W
	FDK			0.10 Ω to 39 k Ω 0.10 Ω to 22 k Ω	+ 180 ppm/K / ± 5 % + 180 ppm/K / ± 2 %	5.5 W
	FDP			0.15 Ω to 68 k Ω 0.15 Ω to 33 k Ω	+ 180 ppm/K / ± 5 % + 180 ppm/K / ± 2 %	10.0 W



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Component	Series/Part Number	Features/Benefits	Qualification	Qualified Value Range	TCR	Power Rating
Fixed Linear Resistors	CMF07 (Military type RL07)	<ul style="list-style-type: none"> Axial film resistor Military qualified Multiple body sizes 	MIL-PRF-22684/1	51 Ω to 150 kΩ	200 ppm/°C	0.25 W
	CMF20 (Military type RL20)	<ul style="list-style-type: none"> Monthly acceptance testing 100 % screen tested Traceability of materials and processes 	MIL-PRF-22684/2	4.3 Ω to 470 kΩ	200 ppm/°C	0.50 W
	CMF50 (Military type RN50)	<ul style="list-style-type: none"> Low noise Excellent high-frequency characteristics 	MIL-R-10509/8	10 Ω to 100 kΩ	25, 50, and 100 ppm/°C	0.05 W
	CMF55 (Military type RN55)		MIL-R-10509/7	10 Ω to 301 kΩ		0.10 W to 0.125 W
	CMF60 (Military type RN60)		MIL-R-10509/1	10 Ω to 1 MΩ		0.125 W to 0.25 W
	CMF65 (Military type RN65)		MIL-R-10509/2	10 Ω to 2 MΩ		0.25 W to 0.50 W
	CMF70 (Military type RN70)		MIL-R-10509/3	10 Ω to 2.49 MΩ		0.50 W to 1 W
	DFM14 (Military type RZ030)	<ul style="list-style-type: none"> Thick film flat pack resistor networks Military qualified Multiple schematics and pin counts Monthly acceptance testing 100 % screen tested per Group A Traceability of materials and processes 	MIL-PRF-83401/03	10 Ω to 1 MΩ	100 and 300 ppm/°C	0.015 W/element to 0.050 W/element
	ERC50 (Military type RNC50, RNR50)	<ul style="list-style-type: none"> Axial film resistor Established reliability military qualified (verified failure rates) 	MIL-PRF-55182/7	10 Ω to 796 kΩ	25, 50, and 100 ppm/°C	0.05 W to 0.10 W
	ERC55 (Military type RNC55, RNR55)	<ul style="list-style-type: none"> Multiple body sizes Monthly acceptance testing 100 % tested per Group A Traceability of materials and processes 	MIL-PRF-55182/1	10 Ω to 2 MΩ	25, 50, and 100 ppm/°C	0.10 W to 0.125 W
	ERC60 (Military type RNC60, RNR60)	<ul style="list-style-type: none"> Low noise Excellent high frequency characteristics 	MIL-PRF-55182/3	10 Ω to 2 MΩ	25, 50, and 100 ppm/°C	0.125 W to 0.25 W
	ERC65 (Military type RNC65, RNR65)	<ul style="list-style-type: none"> Customs available, per source control drawings 	MIL-PRF-55182/5	10 Ω to 3.01 MΩ	25, 50, and 100 ppm/°C	0.25 W to 0.50 W
	ERC70 (Military type RNC70, RNR70)		MIL-PRF-55182/6	10 Ω to 3.01 MΩ	25, 50, and 100 ppm/°C	0.50 W to 0.75 W
	ERH (Military type RER60, RER65, RER70, RER75)	<ul style="list-style-type: none"> Chassis mounted Wirewound Precision Established reliability 	MIL-PRF-39009/1	0.1 Ω to 39.2 kΩ	± 100 for 0.1 Ω to 0.99 Ω; ± 50 for 1 Ω to 19.9 Ω; ± 20 for 20 Ω and above	5 W, 10 W, 20 W and 30 W
	ENH (Military type RER40, RER45, RER50, RER55)	<ul style="list-style-type: none"> Power resistor 	MIL-PRF-39009/2	1.0 Ω to 6.04 kΩ	± 50 for 1 Ω to 19.9 Ω; ± 20 for 20 Ω and above	5 W, 10 W, 20 W, and 30 W



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Component	Series/Part Number	Features/Benefits	Qualification	Qualified Value Range	TCR	Power Rating
Fixed Linear Resistors	ERL05 (Military type RLR05)	<ul style="list-style-type: none"> Axial film resistor Established reliability military qualified (verified failure rates) 	MIL-PRF-39017/5	4.7 Ω to 1 MΩ	100 ppm/°C	0.125 W
	ERL07 (Military type RLR07)	<ul style="list-style-type: none"> Multiple body sizes Monthly acceptance testing 100 % tested per Group A 	MIL-PRF-39017/1	1 Ω to 10 MΩ	100 ppm/°C	0.25 W
	ERL20 (Military type RLR20)	<ul style="list-style-type: none"> Traceability of materials and processes Low noise 	MIL-PRF-39017/2	4.3 Ω to 3.01 MΩ	100 ppm/°C	0.50 W
	ERL32 (Military type RLR32)	<ul style="list-style-type: none"> Excellent high frequency characteristics Customs available, per source control drawings 	MIL-PRF-39017/3	1 Ω to 2.7 MΩ	100 ppm/°C	1 W
	ERL (DSCC Drawings)	<ul style="list-style-type: none"> Axial film resistor Multiple body sizes Low noise Excellent high-frequency characteristics 	97004	10 Ω to 22 MΩ	100 and 200 ppm/°C	2 W
			98020	1.1 MΩ to 22 MΩ	200 ppm/°C	0.125 W
			98021	3.3 MΩ to 22 MΩ	200 ppm/°C	0.5 W
			98022	3 MΩ to 22 MΩ	200 ppm/°C	1 W
			99011	11 MΩ to 22 MΩ	200 ppm/°C	0.25 W
	ESS / ESN (Military type RWR71)	<ul style="list-style-type: none"> Axial-leaded Wirewound Precision Established reliability Power resistor 	MIL-PRF-39007/5	0.1 Ω to 12.1 kΩ	± 650 for 0.1 Ω to 0.499 Ω; ± 400 for 0.505 Ω to 1 Ω; ± 50 for 1.1 Ω to 10 Ω; ± 20 for 10 Ω and above	2 W
			MIL-PRF-39007/6	0.1 Ω to 12.1 kΩ		5 W
			MIL-PRF-39007/7	0.1 Ω to 39.2 kΩ		10 W
			MIL-PRF-39007/8	0.1 Ω to 3.16 kΩ		2 W
	EGS / EGN (Military type RWR80)	<ul style="list-style-type: none"> Axial-leaded Wirewound Precision Established reliability Power resistor 	MIL-PRF-39007/9	0.1 Ω to 1 kΩ	± 650 for 0.1 Ω to 0.499 Ω; ± 400 for 0.505 Ω to 1 Ω; ± 50 for 1.1 Ω to 10 Ω; ± 20 for 10 Ω and above	1 W
			MIL-PRF-39007/10	0.1 Ω to 12.4 kΩ		7 W
			MIL-PRF-39007/11	0.1 Ω to 4.12 kΩ		3 W
			MIL-PRF-39007/12	0.1 Ω to 1.3 kΩ		1.5 W
FRJ50	<ul style="list-style-type: none"> Axial film resistor Zero-ohm jumper 	87010	0 Ω	N/A	N/A	



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Component	Series/Part Number	Features/Benefits	Qualification	Qualified Value Range	TCR	Power Rating
Fixed Linear Resistors	LVR03 (Military type RLV30)	<ul style="list-style-type: none"> Axial-leaded Low ohmic value Power resistor 	MIL-PRF-49465/6	0.01 Ω to 0.2 Ω	± 350 for 0.01 Ω to 0.0249 Ω; ± 200 for 0.025 Ω to 0.0499 Ω; ± 125 for 0.05 Ω to 0.0749 Ω; ± 75 for 0.075 Ω to 0.099 Ω; ± 50 for 0.1 Ω and above	3 W
	LVR05 (Military type RLV31)		MIL-PRF-49465/7	0.01 Ω to 0.3 Ω	± 250 for 0.01 Ω to 0.0249 Ω; ± 150 for 0.025 Ω to 0.0499 Ω; ± 100 for 0.05 Ω to 0.0749 Ω; ± 75 for 0.075 W to 0.099 Ω; ± 50 for 0.1 Ω and above	5 W
	MDM14 (Military type RZ010)	<ul style="list-style-type: none"> Thick film DIP resistor networks Military qualified Multiple schematics and pin counts Monthly acceptance testing 100 % screen tested per Group A Traceability of materials and processes Rugged molded body 	MIL-PRF-83401/01	10 Ω to 1 MΩ	100 and 300 ppm/°C	0.05 W/element to 0.20 W/element
	MDM16 (Military type RZ020)		MIL-PRF-83401/02	10 Ω to 1 MΩ	100 and 300 ppm/°C	0.05 W/element to 0.20 W/element
	MSM06C (Military type RZ040)	<ul style="list-style-type: none"> Thick film SIP resistor networks Military qualified Multiple schematics and pin counts Monthly acceptance testing 100 % screen tested per Group A Traceability of materials and processes Rugged molded body 	MIL-PRF-83401/04	10 Ω to 1 MΩ	100 and 300 ppm/°C	0.10 W/element to 0.20 W/element
	MSM08C (Military type RZ050)		MIL-PRF-83401/05	10 Ω to 1 MΩ	100 and 300 ppm/°C	0.10 W/element to 0.20 W/element
	MSM10C (Military type RZ060)		MIL-PRF-83401/06	10 Ω to 1 MΩ	100 and 300 ppm/°C	0.10 W/element to 0.20 W/element
	MSM06A (Military type RZ070)		MIL-PRF-83401/07	10 Ω to 1 MΩ	100 and 300 ppm/°C	0.07 W/element to 0.12 W/element
	MSM08A (Military type RZ080)		MIL-PRF-83401/08	10 Ω to 1 MΩ	100 and 300 ppm/°C	0.07 W/element to 0.12 W/element
	MSM10A (Military type RZ090)	<ul style="list-style-type: none"> Thick film SIP resistor networks Military qualified Multiple schematics and pin counts Monthly acceptance testing 100 % screen tested per Group A Traceability of materials and processes Rugged molded body 	MIL-PRF-83401/09	10 Ω to 1 MΩ	100 and 300 ppm/°C	0.07 W/element to 0.12 W/element
	MSM06A-S1 and S2 (Military type RZ180)	<ul style="list-style-type: none"> Monthly acceptance testing 100 % screen tested per Group A Traceability of materials and processes Rugged molded body 	MIL-PRF-83401/18	per slash sheet	100 and 300 ppm/°C	0.10 W/element
	MSM08A-S1 through S12 (Military type RZ190)		MIL-PRF-83401/19	per slash sheet	100 and 300 ppm/°C	0.10 W/element
	MSM10A-S2, -S3 and -S4 (Military type RZ240)		MIL-PRF-83401/24	10 Ω to 1 MΩ	100 and 300 ppm/°C	0.07 W/element to 0.12 W/element



MILITARY AND AEROSPACE

Resistors

Component	Series/Part Number	Features/Benefits	Qualification	Qualified Value Range	TCR	Power Rating
Fixed Linear Resistors	PTF56 (DSCC drawing)	<ul style="list-style-type: none"> Axial film resistor Ultra precision Multiple body sizes 100 % screen tested Traceability of materials and processes Very low noise Excellent high-frequency characteristics Ultra high stability Extremely low TC of R and resistance tolerance 	89088	10 Ω to 500 kΩ	5 ppm/°C	0.1 W
	RCWPM0550 (Military type RM0505)	<ul style="list-style-type: none"> Thick film chip resistor Established reliability military qualified (verified failure rates) 	MIL-PRF-55342/02	5.6 Ω to 1 MΩ	100 and 300 ppm/°C	0.055 W
	RCWPM5100 (Military type RM1005)	<ul style="list-style-type: none"> Multiple case sizes Monthly acceptance testing 100 % screen tested per Group A 	MIL-PRF-55342/03	5.6 Ω to 1 MΩ	100 and 300 ppm/°C	0.10 W
	RCWPM5150 (Military type RM1505)	<ul style="list-style-type: none"> Traceability of materials and processes 	MIL-PRF-55342/04	5.6 Ω to 4.75 MΩ	100 and 300 ppm/°C	0.15 W
	RCWPM7225 (Military type RM2208)		MIL-PRF-55342/05	5.6 Ω to 15 MΩ	100 and 300 ppm/°C	0.225 W
	RCWPM0575 (Military type RM0705)		MIL-PRF-55342/06	5.6 Ω to 1 MΩ	100 and 300 ppm/°C	0.10 W
	RCWPM1206 (Military type RM1206)		MIL-PRF-55342/07	5.6 Ω to 5.6 MΩ	100 and 300 ppm/°C	0.25 W
	RCWPM2010 (Military type RM2010)		MIL-PRF-55342/08	5.6 Ω to 15 MΩ	100 and 300 ppm/°C	0.80 W
	RCWPM2512 (Military type RM2512)		MIL-PRF-55342/09	5.6 Ω to 15 MΩ	100 and 300 ppm/°C	1 W
	RCWPM1100 (Military type RM1010)		MIL-PRF-55342/10	5.6 Ω to 5.6 MΩ	100 and 300 ppm/°C	0.50 W
	RCWPM0402 (Military type RM0402)		MIL-PRF-55342/11	5.6 Ω to 1 MΩ	100 and 300 ppm/°C	0.04 W
	RCWPM0603 (Military type RM0603)		MIL-PRF-55342/12	5.6 Ω to 1 MΩ	100 and 300 ppm/°C	0.07 W



MILITARY AND AEROSPACE

Resistors

Component	Series/Part Number	Features/Benefits	Qualification	Qualified Value Range	TCR	Power Rating
Fixed Linear Resistors	RCWPM (DSCC drawings)	<ul style="list-style-type: none"> Thick film chip resistor Zero-ohm jumper Multiple case sizes 	03002, 03013, 03014, 03015, 03016, 87011, 90047, 90048, 90049, 90092, 94011	0 Ω	N/A	N/A
	RH / NH (Military type RE60, RE65, RE70, RE75)	<ul style="list-style-type: none"> Chassis mounted Wirewound precision Power resistor 	MIL-PRF-18546/1	0.1 Ω to 39.2 kΩ	± 100 for 0.1 Ω to 0.99 Ω; ± 50 for 1 Ω to 19.9 Ω; ± 20 for 10 Ω and above	5 W, 10 W, 20 W and 30 W
	RH / NH (Military type RE60, RE65, RE70, RE75)		MIL-PRF-18546/2	0.1 Ω to 35.7 kΩ	± 100 for 0.1 Ω to 0.99 Ω; ± 50 for 1 Ω to 19.9 Ω; ± 20 for 10 Ω and above	75 W and 120 W
	HDN55 (Military Type RNR55, RNN55)	<ul style="list-style-type: none"> Axial film resistor Established reliability military qualified (verified failure rates) Multiple body sizes Monthly acceptance testing 100 % tested per Group A Traceability of materials and processes Low noise Hermetic glass enclosure is impervious to harmful environment 	MIL-PRF-55182/1	10 Ω to 1.21 MΩ	25 and 50 ppm/°C	0.10 W to 1.25 W
	HDN57 (Military Type RNR57, RNN57)		MIL-PRF-55182/2	49.9 Ω to 200 kΩ	25 and 50 ppm/°C	0.125 W to 0.25 W
	HDN60 (Military Type RNR60, RNN60)		MIL-PRF-55182/3	10 Ω to 2.49 MΩ	25 and 50 ppm/°C	0.125 W to 0.25 W
	HDN65 (Military Type RNR65, RNN65)		MIL-PRF-55182/5	24.9 Ω to 4.99 MΩ	25 and 50 ppm/°C	0.25 W to 0.50 W
	HDN70 (Military Type RNR70, RNN70)		MIL-PRF-55182/6	24.9 Ω to 4.99 MΩ	25 and 50 ppm/°C	0.50 W to 0.75 W
	HDN75 (Military Type RNR70, RNN75)		MIL-PRF-55182/10	49.9 Ω to 1.21 MΩ	25 ppm/°C	1 W to 2 W
	RS (Military type RW67, RW68, RW69)		<ul style="list-style-type: none"> Axial-leaded Wirewound Precision Power resistor 	MIL-PRF-26/4	0.1 Ω to 20 kΩ	± 650 for 0.1 Ω to 0.498 Ω; ± 400 Ω for 0.499 Ω to 0.999 Ω; ± 50 for 1 Ω to 9.9 Ω; ± 30 for 10 Ω to 19.9 Ω; ± 20 for 20 Ω and above
	RS / G (Military type RW70, RW74, RW78, RW79)	MIL-PRF-26/5		0.1 Ω to 71.5 kΩ	± 650 for 0.1 Ω to 0.498 Ω; ± 400 Ω for 0.499 Ω to 0.999 Ω; ± 50 for 1 Ω to 9.9 Ω; ± 30 for 10 Ω to 19.9 Ω; ± 20 for 20 Ω and above	1 W to 3 W, 5 W and 10 W
	RS / G (Military type RW80, RW81)	MIL-PRF-26/6		0.1 Ω to 2.74 kΩ	± 650 for 0.1 Ω to 0.498 Ω; ± 400 Ω for 0.499 Ω to 0.999 Ω; ± 50 for 1 Ω to 9.9 Ω; ± 30 for 10 Ω to 19.9 Ω; ± 20 for 20 Ω and above	1 W and 2 W



MILITARY AND AEROSPACE

Resistors

Component	Series/Part Number	Features/Benefits	Qualification	Qualified Value Range	TCR	Power Rating
Fixed Linear Resistors	SOMC (DSCC drawings)	<ul style="list-style-type: none"> Thick film SMD DIP resistor networks Multiple schematics and pin counts Rugged molded body 	87012, 87013	10 Ω to 2.2 M Ω	100 and 300 ppm/ $^{\circ}$ C	0.08 W/element to 0.16 W/element
	SPR1005 (Military type RLV10)	<ul style="list-style-type: none"> Axial-leaded Low-ohmic value Power resistor 	MIL-PRF-49465/1	0.01 Ω to 0.5 Ω	\pm 150 for 0.01 Ω to 0.0249 Ω ; \pm 125 for 0.025 Ω to 0.0499 Ω ; \pm 100 for 0.05 Ω to 0.0749 Ω ; \pm 50 for 0.075 Ω to 0.099 Ω ; \pm 50 for 0.1 Ω and above	5 W
	WSC0001 - 15 (93706)	<ul style="list-style-type: none"> Surface mount, 1 W, power resistor 	93076	0.1 Ω to 2.77 k Ω	\pm 90 for 0.1 Ω to 0.99 Ω ; \pm 50 for 1.0 Ω to 9.9 Ω ; \pm 20 for 10.0 Ω and above	1 W
	WSC0002 - 15 (93077)	<ul style="list-style-type: none"> Surface mount, 2 W, power resistor 	93077	0.1 Ω to 10.4 k Ω		2 W
	WSC01/2 - 15 (93075)	<ul style="list-style-type: none"> Surface mount, 1/2 W, power resistor 	93075	0.1 Ω to 4.99 Ω		0.5 W
	WSL2512 (Military type VLV2512)	<ul style="list-style-type: none"> Metal strip Low-ohmic value Power surface mount resistor 	A-A-55534/08	0.005 Ω to 0.1 Ω	400 ppm/ $^{\circ}$ C	1 W
	WSL2010 (Military type VLV2010)		A-A-55534/07	0.007 Ω to 0.5 Ω		0.5 W
	WSL1206 (Military type VLV1206)		A-A-55534/02	0.007 Ω to 0.5 Ω		0.25 W
	WSR2 (Military type VLV2)		A-A-55534/09	0.005 Ω to 1.0 Ω		110 ppm/ $^{\circ}$ C



MILITARY AND AEROSPACE

Capacitors

Component	Serial/Part Number	Features/Benefits/Qualifications	Qualification	Qualified Value Range	Voltage Range
MLCC Specialty Product Line	M123A10	<ul style="list-style-type: none"> • 0805 case size • Space-level reliability • Proven BP and BX dielectrics in NME construction • Multiple termination finishes available 	MIL-PRF-123	1 pF to 18 000 pF	50 V to 100 V
	M123A11	<ul style="list-style-type: none"> • 1210 case size • Space-level reliability • Proven BP and BX dielectrics in NME construction • Multiple termination finishes available 	MIL-PRF-123	300 pF to 100 000 pF	50 V to 100 V
	M123A12	<ul style="list-style-type: none"> • 1808 case size • Space-level reliability • Proven BP and BX dielectrics in NME construction • Multiple termination finishes available 	MIL-PRF-123	300 pF to 100 000 pF	50 V to 100 V
	M123A13	<ul style="list-style-type: none"> • 2225 case size • Space-level reliability • Proven BP and BX dielectrics in NME construction • Multiple termination finishes available 	MIL-PRF-123	1100 pF to 470 000 pF	50 V to 100 V
	M123A21	<ul style="list-style-type: none"> • 1206 case size • Space-level reliability • Proven BP and BX dielectrics in NME construction • Multiple termination finishes available 	MIL-PRF-123	1 pF to 39 000 pF	50 V to 100 V
	M123A22	<ul style="list-style-type: none"> • 1812 case size • Space-level reliability • Proven BP and BX dielectrics in NME construction • Multiple termination finishes available 	MIL-PRF-123	100 pF to 56 000 pF	50 V to 100 V
	M123A23	<ul style="list-style-type: none"> • 1825 case size • Space-level reliability • Proven BP and BX dielectrics in NME construction • Multiple termination finishes available 	MIL-PRF-123	3600 pF to 470 000 pF	50 V to 100 V
	CDR01	<ul style="list-style-type: none"> • Standard capacitance • 0805 case size • Established reliability • Tin/lead "Z" code and solder coat "U" code terminations available 	MIL-PRF-55681/1	10 pF to 4700 pF	50 V to 100 V
	CDR02	<ul style="list-style-type: none"> • Standard capacitance • 1805 case size • Established reliability • Tin/lead "Z" code and solder coat "U" code terminations available 	MIL-PRF-55681/1	220 pF to 22 000 pF	50 V to 100 V
	CDR03	<ul style="list-style-type: none"> • Standard capacitance • 1808 case size • Established reliability • Tin/lead "Z" code and solder coat "U" code terminations available 	MIL-PRF-55681/1	330 pF to 68 000 pF	50 V to 100 V
	CDR04	<ul style="list-style-type: none"> • Standard capacitance • 1812 case size • Established reliability • Tin/lead "Z" code and solder coat "U" code terminations available 	MIL-PRF-55681/1	1200 pF to 180 000 pF	50 V to 100 V



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Capacitors

Component	Serial/Part Number	Features/Benefits/Qualifications	Qualification	Qualified Value Range	Voltage Range
MLCC Specialty Product Line	CDR06	<ul style="list-style-type: none"> Standard capacitance 2225 case size Established reliability Tin/lead "Z" code and solder coat "U" code terminations available 	MIL-PRF-55681/3	390 000 pF to 470 000 pF	50 V
	CDR31	<ul style="list-style-type: none"> Standard capacitance 0805 case size Established reliability Tin/lead "Z" code and solder coat "U" code terminations available 	MIL-PRF-55681/7	1.0 pF to 18 000 pF	50 V to 100 V
	CDR32	<ul style="list-style-type: none"> Standard capacitance 1206 case size Established reliability Tin/lead "Z" code and solder coat "U" code terminations available 	MIL-PRF-55681/8	1.0 pF to 39 000 pF	
	CDR33	<ul style="list-style-type: none"> Standard capacitance 1210 case size Established reliability Tin/lead "Z" code and solder coat "U" code terminations available 	MIL-PRF-55681/9	1000 pF to 100 000 pF	
	CDR34	<ul style="list-style-type: none"> Standard capacitance 1812 case size Multilayer ceramic chip capacitors Established reliability Tin/lead "Z" code and solder coat "U" code terminations available 	MIL-PRF-55681/10	2200 pF to 180 000 pF	
	CDR35	<ul style="list-style-type: none"> Standard capacitance 1825 case size Established reliability Tin/lead "Z" code and solder coat "U" code terminations available 	MIL-PRF-55681/11	4700 pF to 470 000 pF	
	DSCC 03028	<ul style="list-style-type: none"> Standard capacitance Smaller case size (0603) Screened per DSCC drawing Tin/lead "Z" code terminations available 	DSCC 03028	1 pF to 100 000 pF	6.3 V to 100 V
	DSCC 03029	<ul style="list-style-type: none"> Standard capacitance Smaller case size (0402) Multilayer ceramic chip capacitors Screened per DSCC drawing Tin/lead "Z" code terminations available 	DSCC 03029	1 pF to 10 000 pF	
	DSCC 05001	<ul style="list-style-type: none"> High frequency applications Maximum DF of 0.05 % Case size 0805 Tin/lead "Z" code terminations available 	DSCC 05001	1 pF to 100 pF	50 V to 250 V
	DSCC 05002	<ul style="list-style-type: none"> High frequency applications Maximum DF of 0.05 % Case size 0603 Tin/lead "Z" code terminations available 	DSCC 05002	1 pF to 100 pF	
	DSCC 05003	<ul style="list-style-type: none"> High frequency applications Maximum DF of 0.05 % Case size 0402 Tin/lead "Z" code terminations available 	DSCC 05003	1 pF to 27 pF	50 V to 100 V



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Capacitors

Component	Serial/Part Number	Features/Benefits/Qualifications	Qualification	Qualified Value Range	Voltage Range
MLCC Specialty Product Line	DSCC 05006	<ul style="list-style-type: none"> Extended capacitance Standard CDR case size (0805) Screened per DSCC drawing Tin/lead "Z" code and solder coat "U" code terminations available 	DSCC 05006	1 pF to 220 000 pF	10 V to 200 V
	DSCC 05007	<ul style="list-style-type: none"> Extended capacitance Standard CDR case size (1206) Screened per DSCC drawing Tin/lead "Z" code and solder coat "U" code terminations available 	DSCC 05007	1 pF to 470 000 pF	16 V to 200 V
	VJ HiRel COG (NPO)	<ul style="list-style-type: none"> Extended capacitance, case sizes 0402 to 2225 Hi-rel screened to MIL-PRF-55681 Group A and C guidelines Tin/lead terminations available 	HI REL COTS	1 pF to 39 000 pF	10 V to 600 V
	VJ HiRel X7R / X5R	<ul style="list-style-type: none"> Extended capacitance Case sizes 0402 to 3640 Hi-rel screened to MIL-PRF-55681 Group A and C guidelines Tin/lead terminations available 	HI REL COTS	100 pF to 6.8 μ F	6.3 V to 500 V
Tantalum Capacitors	CWR06	<ul style="list-style-type: none"> Standard capacitance range Conformal case Tantalum chip capacitor Established reliability Gold or tin/lead terminations available 	MIL-PRF-55363/4	0.10 μ F to 100 μ F	4 V to 50 V
	CWR16	<ul style="list-style-type: none"> Extended capacitance range Conformal case Tantalum chip capacitor, Established reliability Gold or tin/lead terminations available 	MIL-PRF-55365/13	0.33 μ F to 330 μ F	4 V to 35 V
	DSCC 02002	<ul style="list-style-type: none"> Vishay 195D series Standard capacitance range Conformal coated Tantalum chip capacitor Hi-rel screened Tin/lead terminations available 	DSCC 02002	10 μ F to 150 μ F	10 V to 40 V



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Capacitors

Component	Serial/Part Number	Features/Benefits/Qualifications	Qualification	Qualified Value Range	Voltage Range
Tantalum Capacitors	T95	<ul style="list-style-type: none"> Extended capacitance Conformal case Tantalum chip capacitor Hi-rel screened Tin/lead terminations available 	HI REL COTS	0.10 μ F to 680 μ F	4 V to 50 V
	Capacitors	<ul style="list-style-type: none"> Standard capacitance range Molded case Tantalum chip capacitor Established reliability Tin/lead terminations 	MIL-PRF-55365/8	0.10 μ F to 100 μ F	
	DSCC 95158	<ul style="list-style-type: none"> Vishay 593D series Low ESR Standard capacitance range Molded case Tantalum chip capacitor Hi-rel screened Tin/lead terminations available 	DSCC 95158	4.7 μ F to 220 μ F	
	T83	<ul style="list-style-type: none"> Extended capacitance Molded case Tantalum chip capacitor Hi-rel screened Tin/lead terminations available 	HI REL COTS	0.10 μ F to 330 μ F	
	CSR13	<ul style="list-style-type: none"> Standard capacitance range Metal case Hermetically sealed Axial-leaded Solid tantalum capacitor Tin/lead terminations 	MIL-PRF-39003/01	0.056 μ F to 330 μ F	6 V to 100 V
	CSR23	<ul style="list-style-type: none"> Extended capacitance range Metal case Hermetically sealed Axial-leaded Solid tantalum capacitor Tin/lead terminations 	MIL-PRF-39003/03	1.2 μ F to 1000 μ F	6 V to 50 V
	T97	<ul style="list-style-type: none"> Ultra-low ESR Robust dual anode design Extended capacitance Conformal case Tantalum chip capacitor Hi-rel screened Tin/lead terminations available 	HI REL COTS	22 μ F to 1500 μ F	4 V to 50 V
	CSR21	<ul style="list-style-type: none"> Standard capacitance range Low ESR Metal case Hermetically sealed Axial-leaded Solid tantalum capacitor Tin/lead terminations 	MIL-PRF-39003/09	5.6 μ F to 330 μ F	6 V to 50 V
	CLR65	<ul style="list-style-type: none"> Standard capacitance range Silver case, hermetically sealed, axial-leaded Wet tantalum capacitor Established reliability Tin/lead terminations 	MIL-PRF-39006/09	1.7 μ F to 1200 μ F	6 V to 125 V



MILITARY AND AEROSPACE

Capacitors

Component	Serial/Part Number	Features/Benefits/Qualifications	Qualification	Qualified Value Range	Voltage Range
Tantalum Capacitors	CLR69	<ul style="list-style-type: none"> Extended capacitance range Silver case, hermetically sealed, axial-leaded Wet tantalum capacitor Established reliability Tin/lead terminations 	MIL-PRF-39006/21	6.8 μ F to 2200 μ F	6 V to 125 V
	M39006/22 or CLR79	<ul style="list-style-type: none"> Standard capacitance range Tantalum case, hermetically sealed, axial leaded Wet tantalum capacitor Established reliability Tin/lead terminations 	MIL-PRF-39006/22	1.7 μ F to 1200 μ F	
	M39006/25 or CLR81	<ul style="list-style-type: none"> Extended capacitance range Tantalum case, hermetically sealed, axial-leaded Wet tantalum capacitor Established reliability Tin/lead terminations 	MIL-PRF-39006/25	6.8 μ F to 2200 μ F	
	M39006/30 or CLR90	<ul style="list-style-type: none"> Low ESR Standard capacitance range Tantalum case, hermetically sealed, axial-leaded Wet tantalum capacitor Established reliability Tin/lead terminations 	MIL-PRF-39006/30	1.7 μ F to 1200 μ F	
	M39006/31 or CLR91	<ul style="list-style-type: none"> Low ESR Standard capacitance range Tantalum case, hermetically sealed, axial-leaded Wet tantalum capacitor Established reliability Tin/lead terminations 	MIL-PRF-39006/31	6.8 μ F to 2200 μ F	
	DSCC 06013	<ul style="list-style-type: none"> Space level screened, CLR79, MIL approved Standard capacitance range Tantalum case, hermetically sealed, axial-leaded Wet tantalum capacitor Established reliability Tin/lead terminations 	DSCC 06013	1.7 μ F to 1200 μ F	
	DSCC 06014	<ul style="list-style-type: none"> Space level screened, CLR81, MIL approved Extended capacitance range Tantalum case, hermetically sealed, axial-leaded Wet tantalum capacitor Established reliability Tin/lead terminations 	DSCC 06014	6.8 μ F to 2200 μ F	



MILITARY AND AEROSPACE

Capacitors

Component	Serial/Part Number	Features/Benefits/Qualifications	Qualification	Qualified Value Range	Voltage Range
Tantalum Capacitors	DSCC 06015	<ul style="list-style-type: none"> Space level screened, CLR90, MIL approved Low ESR Standard capacitance range Tantalum case, hermetically sealed, axial-leaded Wet tantalum capacitor Established reliability Tin/lead terminations 	DSCC 06015	1.7 μ F to 1200 μ F	6 V to 125 V
	DSCC 06016	<ul style="list-style-type: none"> Space level screened, CLR91, MIL approved Low ESR Extended capacitance range Tantalum case, hermetically sealed, axial-leaded Wet tantalum capacitor Established reliability Tin/lead terminations 	DSCC 06016	6.8 μ F to 2200 μ F	
	ST	<ul style="list-style-type: none"> Ultra extended capacitance range Tantalum case, hermetically sealed, axial-leaded Wet tantalum capacitor Tin/lead terminations 	HI REL COTS	10 μ F to 1800 μ F	25 V to 125 V
	DSCC 93026	<ul style="list-style-type: none"> Super extended capacitance range Tantalum case, hermetically sealed, axial leaded Wet tantalum capacitor Hi-rel screened Tin/lead terminations 	DSCC 93026	10 μ F to 1800 μ F	
	STA	<ul style="list-style-type: none"> Ultra extended capacitance range Tantalum case, hermetically sealed, axial-leaded Wet tantalum capacitor Tin/lead terminations 	HI REL COTS	150 μ F to 4700 μ F	6 V to 15 V
	STE	<ul style="list-style-type: none"> Ultra extended capacitance range Tantalum case, hermetically sealed, axial-leaded Wet tantalum capacitor, tin/lead terminations 		750 μ F to 6000 μ F	16 V to 75 V
	DSCC 04033	<ul style="list-style-type: none"> MIL-DTL-3965 styles CL13, CL16, CL19 Metal case, hermetically sealed, axial and solder lug configurations Wet tantalum capacitor Tin/lead terminations 	DSCC 04033	2 μ F to 1300 μ F	8 V to 630 V
	DSCC 04021	<ul style="list-style-type: none"> MIL-DTL-3965 styles CL55 Metal case, hermetically sealed, solder lug configurations, Wet tantalum capacitor array Tin/lead terminations 	DSCC 04021	70 μ F to 2400 μ F	15 V to 150 V



MILITARY AND AEROSPACE

Magnetics, Inductors

Component	Serial/Part Number	Features/Benefits	Qualification	Qualified Value Range	Rated DC Current
Magnetics/ Inductors	MS21426	<ul style="list-style-type: none"> Type LT Molded Shielded Miniature Tin/lead axial leads IMS-2 series 	MIL-PRF-15305 -14 to -37	1.2 μ H to 100 μ H	51 mA to 247 mA
	MS75087	<ul style="list-style-type: none"> Type LT Molded Shielded 	MIL-PRF-15305 -1 to -12	0.10 μ H to 0.82 μ H	370 mA to 1790 mA
	MS75088	<ul style="list-style-type: none"> Tin/lead axial leads IMS-5 series 	MIL-PRF-15305 -1 to -14	1.0 μ H to 12 μ H	200 mA to 1070 mA
	MS75083	<ul style="list-style-type: none"> Type LT Molded 	MIL-PRF-15305 -1 to -13	0.10 μ H to 1.0 μ H	385 mA to 1350 mA
	MS75084	<ul style="list-style-type: none"> Tin/lead axial leads IM-2 series 	MIL-PRF-15305 -1 to -17	1.2 μ H to 27 μ H	135 mA to 590 mA
	MS75085		MIL-PRF-15305 -1 to -19	33 μ H to 1000 μ H	28 mA to 130 mA
	MS18130	<ul style="list-style-type: none"> Type LT Molded 	MIL-PRF-15305 -1 to -16	0.15 μ H to 4.7 μ H	260 mA to 2450 mA
	MS14046	<ul style="list-style-type: none"> Tin/lead axial leads IM-4 Series 	MIL-PRF-15305 -1 to -10	5.6 μ H to 33 μ H	165 mA to 495 mA
	MS90538		MIL-PRF-15305 -1 to -21	36 μ H to 240 μ H	101 mA to 180 mA
	MS75101	<ul style="list-style-type: none"> Type LT Molded Tin/lead axial leads IM-6 Series 	MIL-PRF-15305 -1 to -12	3.3 μ H to 27 μ H	205 mA to 990 mA

**SEMICONDUCTORS*****MOSFETs Segment***

MOSFETs

- Low-Voltage TrenchFET® Power MOSFETs
- Medium-Voltage Power MOSFETs
- High-Voltage Planar MOSFETs
- High-Voltage Superjunction MOSFETs
- Automotive-Grade MOSFETs

ICs

- VRPower® DrMOS Integrated Power Stages
- Power Management and Power Control ICs
- Smart Load Switches
- Analog Switches and Multiplexers

Diodes Segment

Rectifiers

- Schottky Rectifiers
- Ultra-Fast Recovery Rectifiers
- Standard and Fast Recovery Rectifiers
- High-Power Rectifiers/Diodes
- Bridge Rectifiers

Small-Signal Diodes

- Schottky and Switching Diodes
- Zener Diodes
- RF PIN Diodes

Protection Diodes

- TVS Diodes or TRANSZORB® (unidirectional, bidirectional)
- ESD Protection Diodes (including arrays)

Thyristors/SCRs

- Phase-Control Thyristors
- Fast Thyristors

IGBTs

- Field Stop Trench
- Punch-Through Trench

Power Modules

- Input Modules (diodes and thyristors)
- Output and Switching Modules (contain MOSFETs, IGBTs, and diodes)
- Custom Modules

Optoelectronic Components Segment

Infrared Emitters and Detectors

Optical Sensors

- Proximity
- Ambient light
- Light Index (RGBW, UV, IR)
- Humidity
- Quadrant Sensors
- Transmissive
- Reflective

Infrared Remote Control Receivers

Optocouplers

- Phototransistor, Photodarlington
- Linear
- Phototriac
- High-Speed
- IGBT and MOSFET Driver

Solid-State Relays

LEDs and 7-Segment Displays

Infrared Data Transceiver Modules

Custom Products

PASSIVE COMPONENTS***Resistors and Inductors Segment***

Film Resistors

- Metal Film Resistors
- Thin Film Resistors
- Thick Film Resistors
- Power Thick Film Resistors
- Metal Oxide Film Resistors
- Carbon Film Resistors

Wirewound Resistors

- Vitreous, Cemented, and Housed Resistors
- Braking and Neutral Grounding Resistors
- Custom Load Banks

Power Metal Strip® Resistors

Battery Management Shunts

Crowbar and Steel Blade Resistors

Thermo Fuses

Chip Fuses

Pyrotechnic Initiators / Igniters

Variable Resistors

- Cermet Variable Resistors
- Wirewound Variable Resistors
- Conductive Plastic Variable Resistors
- Contactless Potentiometers
- Hall Effect Position Sensors
- Precision Magnetic Encoders

Networks/Arrays

Non-Linear Resistors

- NTC Thermistors
- PTC Thermistors
- Thin Film RTDs
- Varistors

Magnetics

- Inductors
- Wireless Charging Coils
- Planar Devices
- Transformers
- Custom Magnetics

Connectors

Capacitors Segment

Tantalum Capacitors

- Molded Chip Tantalum Capacitors
- Molded Chip Polymer Tantalum Capacitors
- Coated Chip Tantalum Capacitors
- Solid Through-Hole Tantalum Capacitors
- Wet Tantalum Capacitors

Ceramic Capacitors

- Multilayer Chip Capacitors
- Disc Capacitors
- Multilayer Chip RF Capacitors
- Chip Antennas
- Thin Film Capacitors

Film Capacitors

Power Capacitors

Heavy-Current Capacitors

Aluminum Electrolytic Capacitors

ENYCAP™ Energy Storage Capacitors