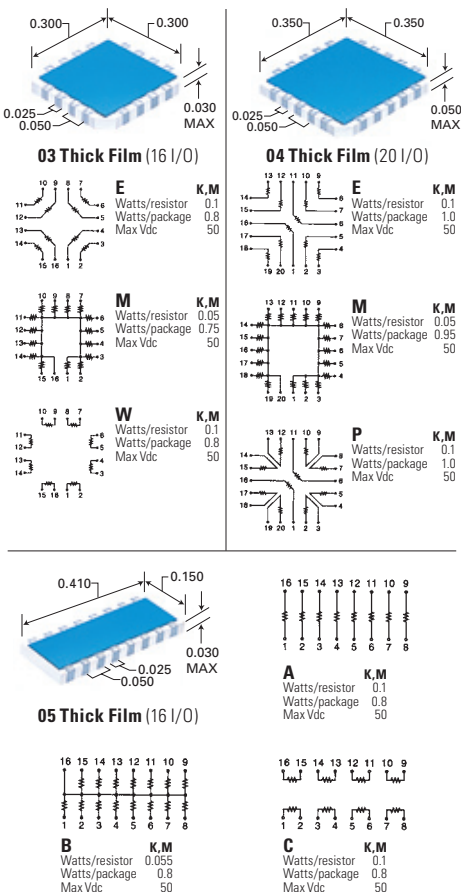


MIL-PRF-914 RESISTOR NETWORKS

MIL-PRF-914 Styles



Packaging

SOTA's surface mount resistor networks are packaged in chip tray carriers ("waffle packs"). Tape and reel packaging is available as an option for the /04 and /05 MIL-PRF-914 networks.

Part Marking

Line 1—Digits 1-3: Date code.
Digit 1 = year, digits 2 & 3 = week.
Digit 4: TCR.

Line 2—Digits 1-4: Resistance value. Three significant digits & multiplier.

Line 3—Digit 1: Tolerance. Digit 2: Schematic configuration. Digit 3: Failure rate. Digit 4: Military JAN certification.

A dot is used to mark the pin one location.



MIL-PRF-914 These Military Grade surface mount resistor networks are available in three sizes and three schematic configurations. MIL-PRF-914 networks are available in two product levels that share design, construction, and materials. Product level M is the established reliability product that receives 100% burn-in testing and other testing described below. Product level C is identical to product level M, but it is not an Established Reliability product; therefore it is not tested.

Product level M is an Established Reliability network with a failure rate of 1% per 1,000 hours, which is maintained by ongoing life tests. Group A Visual Inspection is performed on a monthly inspection lot basis, and the Group B tests are performed on an annual inspection lot basis. If these tests are required on the individual manufacturing lot, we suggest ordering a High Reliability version.

Group A Inspection

- 100% Thermal Shock
- 100% Power Conditioning
- 100% DC Resistance
- Visual Inspection
- Solderability

Group B Inspection

- Visual & Mechanical Inspection
- Temperature Coefficient of Resistance (TCR)
- Resistance to Solvents

Group C Inspection

- Thermal Shock
- Dielectric Withstanding Voltage
- Insulation Resistance
- Low Temperature Operation
- Short-time Overload
- Adhesion
- Resistance to Soldering Heat
- Moisture Resistance
- Life
- Steady State Humidity
- Shock & Vibration
- High Temperature Exposure
- Low Temperature Storage

Part Numbering System To order MIL-PRF-914 networks, follow the part number format below. The part number **M914D04K1002FMM** specifies a 10 K Ω ±1%, thick film network with fused tin/lead terminations in a 0.350 x 0.350 inch, ±100 TCR, schematic M configuration, and 1% per 1,000 hour failure rate.

M914 D 04 K 1002 F M M

						Product Level Designator	
						M: 1 % per 1000 hours ER life failure rate C: Non-ER	
						Schematic Configuration	
						See diagram above	
						Tolerance	
						F: 1%	G: 2%
						J: 5%	
						Resistance Value	
						Three or four digits are used, with all leading digits significant. Four digits are used for 1% tolerance or lower; otherwise, three digits are used. The last digit specifies the number of zeros to add. The letter R is used to represent the decimal for fractional ohmic values. Example: 5R6 is 5.6 Ω; 10R0 is 10 Ω; 16R9 is 16.9 Ω, etc.	
						Temperature Characteristic	
K: ±100 ppm M: ±300 ppm							
Size Code							
03: 0.300 x 0.300"	04: 0.350 x 0.350"	05: 0.410 x 0.150"					
Termination Type							
D: Fused tin/lead plated G: Hot solder dip							
Military Performance Specification MIL-PRF-914							