Specification Details: **Date: 4/7/2011**

Specification: MIL-R-10509
Title: Resistor, Fixed, Film (High Stability)
Federal Supply Class (FSC): 5905
Conventional: Yes
Specification contains quality assurance program: No
MIL-STD-790 Established Reliability & High Reliability: No
MIL-STD-690 Failure Rate Sampling Plans & Procedures: No
Weibull Graded: No
Specification contains space level reliability requirements: No
Specification allows test optimization: No

Contact Information:

Office of Primary Involvement: Passive Devices Branch, DLA Land and Maritime - VQP
Primary Qualifying Activity Contact: 614-692-0597, e-mail: vqp.jz@dla.mil
Secondary Qualifying Activity Contact: 614-692-0665, e-mail: vqp.go@dla.mil

Notes:

Effective 21 April 1994, MIL-R-10509 has been declared "Inactive for New Design." For new design, use MIL-PRF-55182. This is applicable on all acquisitions to which MIL-R-10509 is applied.

PIN: The PIN consists of the Style, Characteristic, Resistance, and Resistance Tolerance.

Style: The style is identified by the two letter symbol "RN" followed by a two digit number; the letters identify high stability, film, fixed resistors, and the number identifies the size of the resistors.

Characteristic: The characteristic is identified by a single letter.

Resistance: The nominal resistance expressed in ohms is identified by four digits: The first three digits represent significant figures and the last digit specifies the number of zeros to follow. When the value of resistance is less than 100 ohms, or when fractional values of an ohm are required, the letter "R" is substituted for one of the significant digits to represent the decimal point. When the letter "R" is used, succeeding digits of the group represent significant figures.

Resistance tolerance: The resistance tolerance is identified by a single letter.

Part Configuration:

RN60D1003F

Style	Characteristic	Resistance	Resistance Tolerance
RN60	D	1003	F

PART LISTINGS

GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION OR TYPE NUMBER	TEST OR QUALIFICATION REFERENCE	SPECIFI-CATION SHEET	SUPPLIER'S NAME (ADDRESS ON LAST PAGE)
RN50				
Char. C; 10 ohms thru 100 kilohms; res. tol. F	T2-50	10509-587-82	/8	IRC/TT Electronics
Char. C, E; 10 ohms thru 100 kilohms; res. tol. B, C, D, F	CMF50	10509-1120-77	/8	Vishay Dale Electronics, Inc. (1)
RN55				
Char. D; 49.9 ohms thru 301 kilohms; res. tol. F	TO-55	10509-151-97; 10509-217-68	/7	IRC/TT Electronics
Char. C, E; 49.9 ohms thru 100 kilohms; res. tol. D, F	T2-55, T9-55	10509-17-70	/7	IRC/TT Electronics
Char. D; 10 ohms thru 301 kilohms; res. tol. F	CMF-55, CMF-55-143	10509-579-90	/7	Vishay Dale Electronics, Inc. (1)
Char. C, E; 49.9 ohms thru 100 kilohms; res. tol. B, C, D, F	CMF-55, CMF-55-143	10509-579-90	/7	Vishay Dale Electronics, Inc. (1)
Char. C; 49.9 ohms thru 100 kilohms; res. tol. D, F	CMF-55	10509-057-01	/7	Vishay Dale Electronics, Inc. (2)
Char. D; 49.9 ohms thru 301 kilohms; res. tol. F	CMF-55	10509-057-01	/7	Vishay Dale Electronics, Inc. (2)

PART LISTINGS				
GOVERNMENT DESIGNATION	MANUFACTURER'S DESIGNATION OR TYPE NUMBER	TEST OR QUALIFICATION REFERENCE	SPECIFI-CATION SHEET	SUPPLIER'S NAME (ADDRESS ON LAST PAGE)
RN60				
Char. D; 10 ohms thru 1 megohms; res. tol. F	TO-60	10509-160-72	/1	IRC/TT Electronics
Char. C, E; 49.9 ohms thru 499 kilohms; res. tol. B, C, D, F	T2-60, T9-60	10509-18-70	/1	IRC/TT Electronics
Char. D; 49.9 ohms thru 1 megohms; res. tol. F	CMF-60, CMF-60-143	10509-1670-86	/1	Vishay Dale Electronics, Inc. (1)
Char. C, E; 49.9 ohms thru 499 kilohms; res. tol. B, C, D, F	CMF-60, CMF-60-143	10509-1670-86	/1	Vishay Dale Electronics, Inc. (1)
Char. C; 49.9 ohms thru 499 kilohms; res. tol. F	CMF-60	10509-590-03	/1	Vishay Dale Electronics, Inc. (2)
Char. D; 49.9 ohms thru 1 megohms; res. tol. F	CMF-60	10509-590-03	/1	Vishay Dale Electronics, Inc. (2)
RN65				
Char. D; 10 ohms thru 1 megohms; res. tol. F	TO-65	10509-1052-71	/2	IRC/TT Electronics
Char. C, E; 49.9 ohms thru 1 megohms; res. tol. B, C, D, F	T9-65	55182-869-78	/2	IRC/TT Electronics
Char. C, E; 49.9 ohms thru 1 megohms; res. tol. B, C, D, F	CMF-65	10509-1030-71	/2	Vishay Dale Electronics, Inc. (1)
Char. D; 10 ohms thru 2 megohms; res. tol. F	CMF-65	10509-1029-71	/2	Vishay Dale Electronics, Inc. (1)
RN70				
Char. C, E; 24.9 ohms thru 1 megohms; res. tol. B, C, D, F	CMF-70	10509-393-87	/3	Vishay Dale Electronics, Inc. (1)
Char. D; 10 ohms thru 2.49 megohms; res. tol. F	CMF-70	10509-394-87	/3	Vishay Dale Electronics, Inc. (1)

Manufacturer and Supplier Location Information

Manufacturer: IRC/TT Electronics (CAGE Code: 11502)

Location: International Resistive Company, Inc., 736 Greenway Road, Boone, NC 28607-4830, US

Plants:

1. Plant: Same Address as Manufacturer

Manufacturer: Vishay Dale Electronics, Inc. (CAGE Code: 91637)

Location: P.O. Box 609, 1122 23rd Street, Columbus, NE 68602-0609, US

Plants:

1. Plant: Same Address as Manufacturer
2. Vishay Dale Electronics, Inc. (2), Vishay Dale Mexico, Parque Ind. A.J. Bermudez, Calle Ohm No. 8750, Cd. Juarez, Chihuahua, C.P. 32470, Mexico