

Carbon Film Resistors

Non Inductive Type

Normal & Miniature Style [NCR Series]

FEATURES

Power Rating : 1/4W, 1/2WS, 1/2W, 1WS, 1W, 2WS, 2W, 3WS

Resistance Tolerance : $\pm 5\%$, $\pm 10\%$

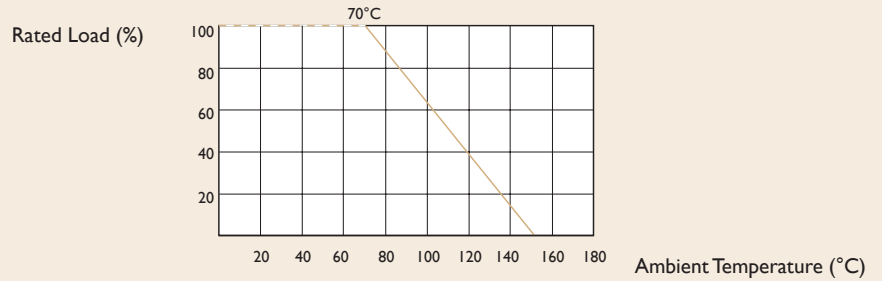
FlameProof Silicone Coating : UL94V-0

Gray body color

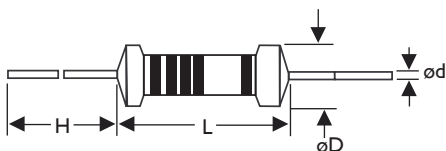
The 5th color band is green to represent non-inductive resistors

Inductance : $< 1 \mu\text{H}$

POWER DERATING CURVE



DIMENSIONS



Unit : mm

STYLE		DIMENSION			
Normal	Miniature	L	øD	H	ød
NCR-25	NCR50S	6.3±0.5	2.4±0.2	28±2.0	0.6±0.05
NCR-50	NCR1WS	9.0±0.5	3.3±0.3	26±2.0	0.7±0.05
NCR100	NCR2WS	11.5±1.0	4.5±0.5	35±2.0	0.8±0.05
NCR200	NCR3WS	15.5±1.0	5.0±0.5	33±2.0	0.8±0.05



Note :

ELECTRICAL CHARACTERISTICS

STYLE	TEST METHOD	NCR-25	NCR50S	NCR-50	NCR1WS	NCR100	NCR2WS	NCR200	NCR3WS
Power Rating at 70°C		1/4W	1/2W		1W		2W		3W
Dielectric Withstanding Voltage	JIS-C-5202 5.7 in V-Block for 60 Seconds	500V	500V	700V	700V	1000V	1000V	1000V	1000V
Temperature Coefficient	JIS-C-5202 5.2 Room Temp.Add 100°C	±500ppm/°C							
Short Time Overload	JIS-C-5202 5.5 2.5 Times RCWV for 5 Seconds	±0.75%+0.05Ω	±2.0%+0.05Ω						
Insulation Resistance	JIS-C-5202 5.6 in V-Block	>1,000MΩ							
Pulse Overload	JIS-C-5202 5.8 4 Times RCWV 10,000 Cycles (1 Sec. on , 25 Sec. off)	±0.75%+0.05Ω	±1.0%+0.05Ω						
Operating Temp. Range		-55°C to + 155°C							
Value Range		2.2Ω To 6KΩ for E24 Series							

* Resistance range for standard resistance, below or over this resistance on request.

ENVIRONMENTAL CHARACTERISTICS

PERFORMANCE TEST	TEST METHOD	APPRAISE
Terminal Strength	JIS-C-5202 6.1 Direct load for 10 Sec. in the Direction of the Terminal Leads	≥2.5kg (24.5N)
Resistance to Soldering Heat	JIS-C-5202 6.4 350°C ± 10°C for 3 ± 0.5 Seconds	±1.0%+0.05Ω
Solderability	JIS-C-5202 6.5 235°C ± 5°C for 5 ± 0.5 Seconds	95% Min. Coverage
Resistance to Solvent	JIS-C-5202 6.9 IPA for 1 Min. with Ultrasonic	No Deterioration of Coatings and Markings
Temperature Cycling	JIS-C-5202 7.4 -55°C→Room Temp.→+155°C→Room Temp. for 5 Cycles	±1.0%+0.05Ω
Humidity	JIS-C-5202 7.5 40±2°C, 90~95% RH for 1,000 Hrs.	±1.0%+0.05Ω
Load Life in Humidity	JIS-C-5202 7.9 40±2°C, 90~95% RH at RCWV for 1,000 Hrs. (1.5 Hrs. on , 0.5 Hrs. off)	±3.0%+0.05Ω
Load Life	JIS-C-5202 7.10 70°C at RCWV for 1,000 Hrs. (1.5 Hrs. on, 0.5 Hrs. off)	±3.0%+0.05Ω
Overload Flame Retardant	JIS-C-5202 7.12 4 Times RCWV for 1 minute	No evidence of flaming or arcing

* Rated Continuous Working Voltage (RCWV)=√ Power Rating x Resistance Value