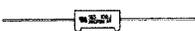


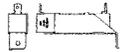


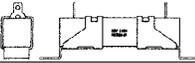
Micron Power Resistors

SELECTION GUIDE

Fields	Mounting	Board Type										Chassis Type							
	Type	MN	MD	MV	MS	MG	MX	MP MQ	MZ	FR	ME	MH	MF	MC	MB	MY	MR	ML	MO
	Page	J4	J5	J5	J6	J6	J6	J7	J7	J10	J11	J8	J9	J9	J12	J13	J14	J15	J16
Consumer Appliances	Color T.V.	○		○	○		○	○	○	○	○	○							
	VCR	○						○		○									
	Audio	○	○		○			○		○									
OA Equipment	Displays	○	○	○	○		○	○	○	○	○	○							
	Printers	○	○		○	○		○			○								
	Facsimile	○	○		○			○											
	Copiers	○		○	○			○		○		○							
Industrial Equipment	Switching Sources	○	○	○	○	○	○	○	○	○	○		○						
	General Inverters	○			○	○		○			○	○	○	○	○	○	○	○	○
	NC, servo Amplifiers	○			○	○		○		○	○	○	○	○	○	○	○	○	○
	Industrial Robots	○			○	○		○			○	○	○	○	○	○	○	○	○
	Welders				○	○		○			○	○	○	○	○	○	○	○	○
Auto-related Appliances	General	○	○		○			○			○	○	○						
Miscellaneous	Kerosene Fan Heaters	○			○			○				○	○						
	Gas Hot-Water Supplies	○						○					○						
	Microwave Ovens											○	○						
	Radio-Controlled Cars				○														

Type	Typical Shape
MN	
MD	
MV	
MS	
MG	
MX	

Type	Typical Shape
MP MQ	
MZ	
MH	
MF	
MC	
FR	

Type	Typical Shape
ME	
MB	
MY	
MR	
ML	
MO	
LTR	



Micron Cement Resistors are the fail-safe resistors exclusively developed for use in TV's and various other electronic appliances. Thanks to their excellent structure and outstanding productivity, performance and construction, they are widely used to protect the current on your board. They have been highly praised in the fields of auto-related appliances and industrial equipment. In particular, we are confident that our own quality control systems and manufacturing techniques are sufficiently top-grade to offer high reliability and a variety of resistor types.

Micron Power Resistors are the resistors of choice by such World Class manufacturers as AT&T, Lucent, IBM, Mitsubishi, Toshiba and many others. All Micron Power Resistors have a lot code printed on the resistor for field traceability.

Features

- **WIDE RESISTANCE RANGE:**

Using wire-wound, metal oxide film, and thick film resistor elements, a very wide range of resistance can be covered.

- **SMALL SIZE AND LARGE CAPACITY:**

Though the resistors are designed to be compact, they are highly durable against rigorous loading.

- **HIGH SAFETY:**

Since they are composed of uniquely developed non-flammable materials, safety is outstanding against overload.

- **SUPERB ELECTRICAL CHARACTERISTICS:**

Using carefully selected materials and based on MICRON's many years of manufacturing experience, stable characteristics are maintained.

- **SURGE WITHSTAND CHARACTERISTICS:**

Surge limiting resistors are designed to meet users' requirements, based on accumulated know-how.

- **WIDE APPLICATION RANGE:**

Various arrangements are being made to expand the application range and meet users' needs.

- **SPECIFICATIONS FOR SPECIAL APPLICATIONS:**

Special specifications are also available, such as non-inductive wire-wound type (AP), solvent-proof type (CL), UL-specifications type, detection-purpose low resistance type, etc.

Standard Characteristics and Performance (Example for MSS)

	Characteristics	Micron Standards		Actual Performance (Average values detected)	EIAJ-RC2649 Standards
		Test Method	Guarantees		
Mechanical performance	Terminal Strength	Pulled at 4.5kg	Durable		—
	Terminal soldering property	Dipped at 230°C for 5 sec.	90% min.	More than 95% of the area covered with new solder	3/4 230°C .5
	Soldering heat durability	350°C for 3 sec.	±2%	Within 0.5%	±(1% + 0.05)
	Resistor strength	10kg for 10sec.	Durable		—
	Vibration durability	10-55-10Hz/min. 1.5mm in 3 directions for 6 hours in total	±1%	Within 0.5%	±(1% + 0.05)
Electrical performance	Withstand voltage	1000V applied for 1 min.	±0.5%	Within 0.1%	± (0.5 + 0.05)
	Insulation resistance	500V megger	20M or more	100M or more	100M or more
	Rated load characteristic	Rated voltage for 30min.	±2%	Within 0.7%	—
	Short-time overload characteristic	Rated power X 10/5sec	±2%	Within 0.5%	±(2% + 0.05)
	Resistance temperature characteristic	-25°C~155°C	400PPM/deg	Within 200PPM/deg.	± 250PPM/°C
Weather-proof performance	Moisture load life characteristic	40°C, 90~95% Rated power	±3%	Within 0.5%	± (3% + 0.05)
	Moisture resistance	DC, 100V 500Hr	5M or more	Within 0.5% 50M or more	—
	Load life	1.5 Hr. ON 0.5 Hr. Off Rated power	±5%	Within 3%	± (5% + 0.05)
	Heat resistance	275°C, 2Hr	No abnormality		—
	Thermal shock	Rated power 30 min. - 25°C for 15 min.	±3%	Within 0.8%	± (2% + 0.05)

Rated Power and Ambient Temperature

	Type MSS		Type RW-98 (EIAJ RC-2649)	
	Rated Power	Ambient Temperature	Rated Power	Ambient Temperature
02	2	70	2	70
03	3		3	
05	5		5	
07	7		7	
10	10		10	
15	15	25	12	
20	20		—	—