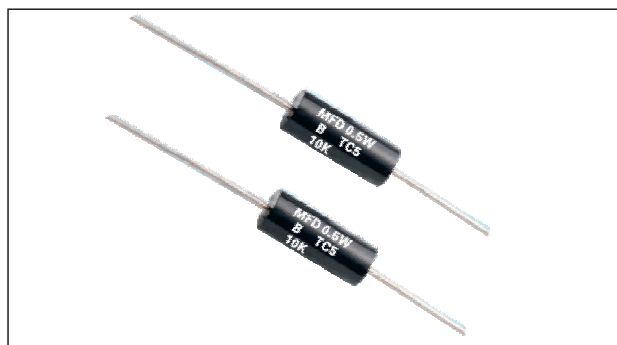
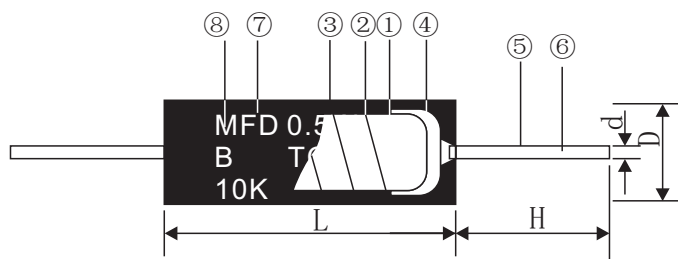




Constructions



①	Ceramic Core(Alumina ceramic)
②	Trimming line
③	Resistor Element(Nickel alloy)
④	Terminal(Tinned iron cap)
⑤	Connection
⑥	Lead Wire(Tinned annealed copper wire)
⑦	Molding (Expoxy)
⑧	Laser Marking

Ordering Information

Example:

MFD	1/8	B	C8	10R0
(1)	(2)	(3)	(4)	(5)
Series Name	Power Rating	Resistance Tolerance	TCR	Resistance

(1)Type: MFD SERIES

(2)Power Rating: 1/8=1/8W、1/4=1/4W、1/2=1/2W、3/4=3/4W、1=1W

(3)Tolerance: P=±0.02%、W=±0.05%、B=±0.1%、D=±0.5%、F=±1%

(4)TCR:C8=±3ppm/°C; C7=±5ppm/°C;C6=±10ppm/°C;C5=±15ppm/°C;C3=±25ppm/°C;

(5)Resistance Value:10R0=10R、R10=0.1Ω、47R0=47Ω

Reference Standards

JIS C 5201-1

Features

I Power Rating:0.125W-1W

II Precision tolerance tight to ±0.02%

III Precision metal film ,excellent stability and reliability

IV Superior electrical TCR performance narrowed to ±5PPM/°C

V lead (Pb)-free and RoHS compliant ,Covers all genral type resistors

Applications

I Medical electronics.

II Telecom.

III Measuring and calibration equipment.

IV Precision instruments avionics.

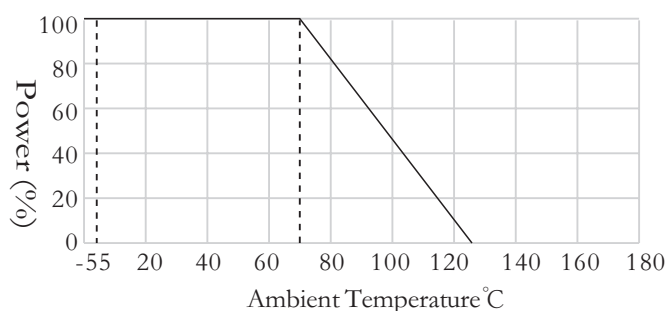
Dimensions

Type	Power (W)	Dimensions(mm)			
		L±0.3	D±0.4	H±3	d±0.05
MFD0419	1/8W	4.4	1.9	25	0.45
MFD0727	1/4W	7.0	2.7	25	0.6
MFD1040	1/2W	10.2	4.0	25	0.6
MFD1551	3/4W	15.5	5.1	25	0.6
MFD1865	1W	18.2	6.5	30	0.6

Applications And Ratings

Type	Power Rating(W)		Operating Temp. Range	Max. Operating Voltage	Max. Overload Voltage	Resistance Range			TCR (PPM/°C)
	at 70°C	at 125°C				± 0.02%	± 0.05%	± 0.1%	
MFD0419	1/8W	1/20W	-55~+125°C	200V	300V	10Ω~500KΩ 10Ω~1MΩ 10Ω~1MΩ 10Ω~1MΩ 10Ω~1MΩ			± 3
MFD0727	1/4W	1/10W		250V	500V				± 5
MFD1040	1/2W	1/8W		300V	600V				± 10
MFD1551	3/4W	1/4W		350V	700V				± 15
MFD1865	1W	1/2W		400V	800V				± 25

Derating Curve



Performance Characteristics

Item	Requirement	Test Method(JIS C 5201-1)
Temperature Coefficient of Resistance (T.C.R.)	As Spec.	-55°C~+125°C, 25°C is the reference temperature
Short Time Overload	± (0.15%R+0.05Ω)	RCWV*2.5 or Max. overload voltage for 5 seconds
Insulation Resistance	>1000MΩ	Apply 500VDC for 1 minute
Endurance	± (0.5%R+0.05Ω)	70 ± 2°C, Max. working voltage for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF"
Damp Heat with Load	± (0.5%R+0.05Ω)	40 ± 2°C, 90~95% R.H. Max. working voltage for 1000 hrs with 1.5 hrs "ON" and 0.5 hrs "OFF"
Solderability	95% min. coverage	245 ± 5°C for 5 seconds
Resistance to Soldering Heat	± (0.1%R+0.01Ω)	350 ± 10°C for 3 seconds after test leave for 3 hours
Terminal Strength	Tensile: ≤2.5kg	Tensile strength: for 10sec Torsional strength: Rotated through 360,5 rotations
Pulse Overload	± (0.1%R+0.01Ω)	4 times RCWV for 1000 cycles with 1 second "ON" and 25 seconds "OFF"
Temperature Cycle	± (0.5%R+0.05Ω)	Low side:-55°C / 30min, room temp:10 to 15min High side:85°C / 30min, room temp:10 to 15min 5 cycles
Resistance to Solvent	No deterioration of coatings and markings	Trichloroethane for 3 min, with ultrasonic