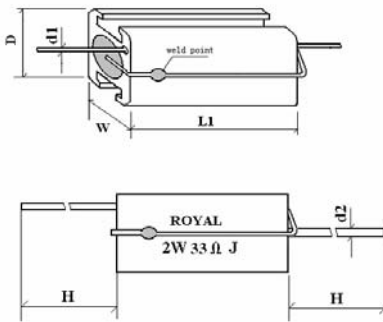
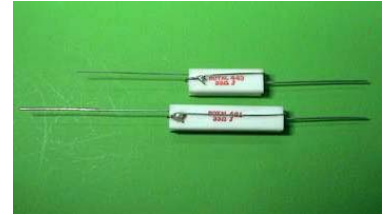
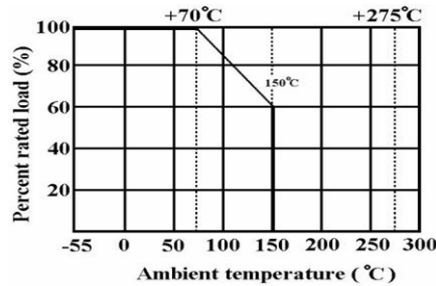


CEMENT THERMAL FUSIBLE RESISTORS

FWI Type



Derating Curve:



Dimension (mm)

Type	Power Rating at 70°C	Resistance Range	W ± 1	D ± 1	L ± 1	H ± 5	d1 +0.02 -0.05	d2 ± 0.05
FWI	2W	0.5Ω ~ 470Ω	9	10	25	36	0.6	0.75

Performance Specifications

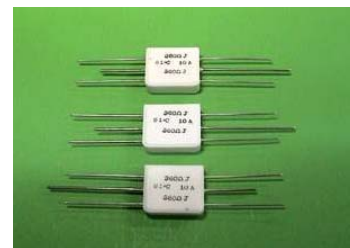
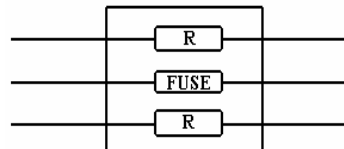
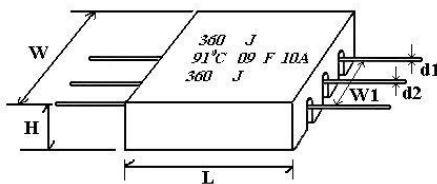
** More details, please see pages 77-78.*

- Temperature coefficient** ≥20Ω: ±350PPM/°C; <20Ω: ±400PPM/°C Max.
- Short-time overload** ΔR/R ≤ ±(5.0% + 0.05Ω) Max., with no evidence of mechanical damage.
- Terminal strength** No evidence of mechanical damage.
- Resistance to soldering heat** ΔR/R ≤ ±(1.0% + 0.05Ω) Max., with no evidence of mechanical damage.
- Solderability** Min. 95% coverage
- Load life in humidity** ΔR/R ≤ ±(5.0% + 0.05Ω) Max., with no evidence of mechanical damage.
- Load life** ΔR/R ≤ ±(5.0% + 0.05Ω) Max., with no evidence of mechanical damage.

THERMAL FUSING POWER FILM FIXED RESISTORS

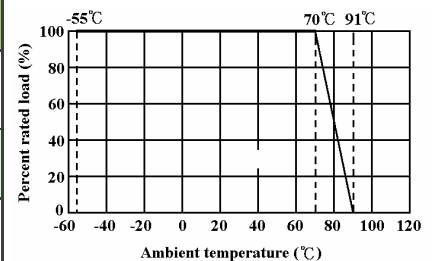
TFRC Type

Dimension (mm):



Type	Power Rating at 70°C	Resistance Range	T.C.R. (PPM/°C)	T _F (°C)	I _r (A)	U _r (V)
TFRC	2W	360Ω+360Ω	±350	91	10	250
L (Max.)	W (Min.)	W₁ (Min.)	H (Min.)	Ød₁ ± 0.02	Ød₂ ± 0.02	
17	17	5	7.5	0.7	1.0	

Derating curve

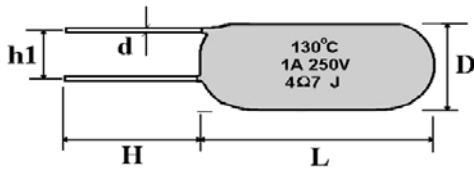


*** other value can be supplied on a case to case basis.

Remark : T_F (°C) = Rated Functioning Temperature
I_r (A) = Rated Current
U_r (V) = Rated Voltage

THERMAL FUSING WIRE-WOUND FIXED RESISTORS

Dimension (mm)



Type	Power Rating at 70°C	Resistance Range	T _F (°C)	T _H / T _C (°C)	T _M (°C)	I _r (A)	U _r (V)
TFR	1W	4Ω7 ± 5%	130	102	180	2	250

D ± 0.5	L ± 1	H (Min.)	h ₁ (Min.)	d ± 0.02
5.5	14	12	3.5	0.53

Remark: T_H / T_C (°C) = Holding Temperature
 T_M(°C) = Max. Temperature Limit
 T_F (°C) = Rated Functioning Temperature
 I_r (A) = Rated Current
 U_r (V) = Rated Voltage

Ordering Procedure: (Ex.: FWI 2W, 5%, 33Ω, B/B)

F	W	I	0	2	W	J	W	3	3	0	B	0	0		
Product Type: FWI0 = FWI TFR0 = TFR TFR0 = TFR0				Wattage: 1W = 1W 2W = 2W		Tolerance: J = ±5% K = ±10%		Resistance Value: E-24 series: the 1 st digit to denote product type: W = Wire wound type P = Power film type The 2 nd and 3 rd digits are for the significant figures of the resistance and the 4 th digit denotes number of zeros: "J" ~ 0.1, "K" ~ 0.01 Ex. 4.7Ω ~ 47J, 4.7KΩ ~ 472				Packing Type: B = Bulk in Poly - bag		Packing Quantity: 0 = for Bulk / Box packing	

* More explanation on part no, please see details on pages 79-80.

Performance Specifications

Temperature coefficient	±400 PPM/°C	
Short-time overload	ΔR/R ≤ ±(2.0% + 0.05Ω) Max. with no evidence of mechanical damage.	
Insulation resistance	Min. 20 Mega Ohm	
Dielectric withstanding voltage	No evidence of flashover, mechanical damage, arcing or insulation break down.	
Terminal strength	with no evidence of mechanical damage.	
Humidity (Steady state)	ΔR/R ≤ ±(3.0% + 0.05Ω) Max. with no evidence of mechanical damage.	
Load life in humidity	ΔR/R ≤ ±(5.0% + 0.05Ω) Max. with no evidence of mechanical damage.	
Load life	ΔR/R ≤ ±(5.0% + 0.05Ω) Max. with no evidence of mechanical damage.	

* More details, please see pages 77-78.