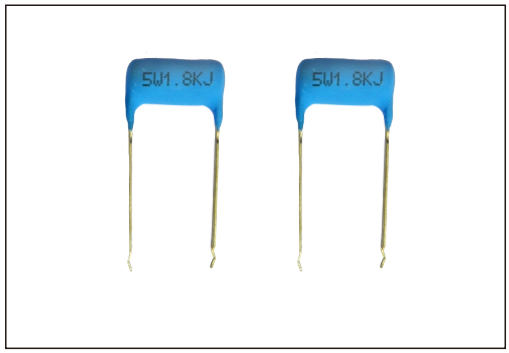
TOMV、TOMR Metal oxide film resistors



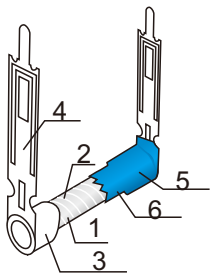
Features

Ⅰ Excellent non-flammable coating process
Ⅱ In harsh and harsh environment is stable
Ⅲ Alumina ceramic core,Super stable membrane layer, Anti-pulse capacity is strong
Ⅳ Electrical performance stability
Ⅳ Reach EIAJ-RC2655A standards
Ⅵ Low or high resistance can be offer

Applications

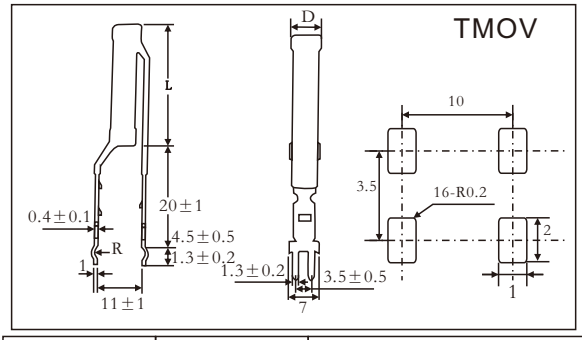
Ⅰ Industrial machinery and equipment
Ⅱ Power supply and control circuit
Ⅲ Automation of industrial robots
Ⅳ Green energy equipment

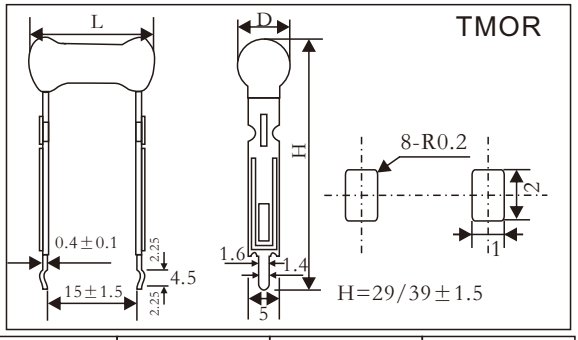
Construction



1	Basic	Rod tye ceraics
2	Resistor	Metal Oxide Film
3	Cap	Tin plated irom
4	Teminal lug	Steel
5	Coating	Insulated and non-flame paint Color:Sea Blue
6	Marking	Epoxy resin

specifications and dimensions





Type	Power Rating at70℃	Dimension(mm)		Max. Working Voltage	Max. Overload Voltage	Max. Pulse Overload Voltage	Resistance Range
		L±1	D±1				
TOMV	5W	20	7	500V	800V	1500V	10Ω～10KΩ
TOMV	7W	30	7	500V	800V	1500V	10Ω～10KΩ
TOMR	3W	16	6	350V	600V	1000V	10Ω～10KΩ
TOMR	5W	18	7	500V	800V	1500V	10Ω～10KΩ

Ordering Information

Example:

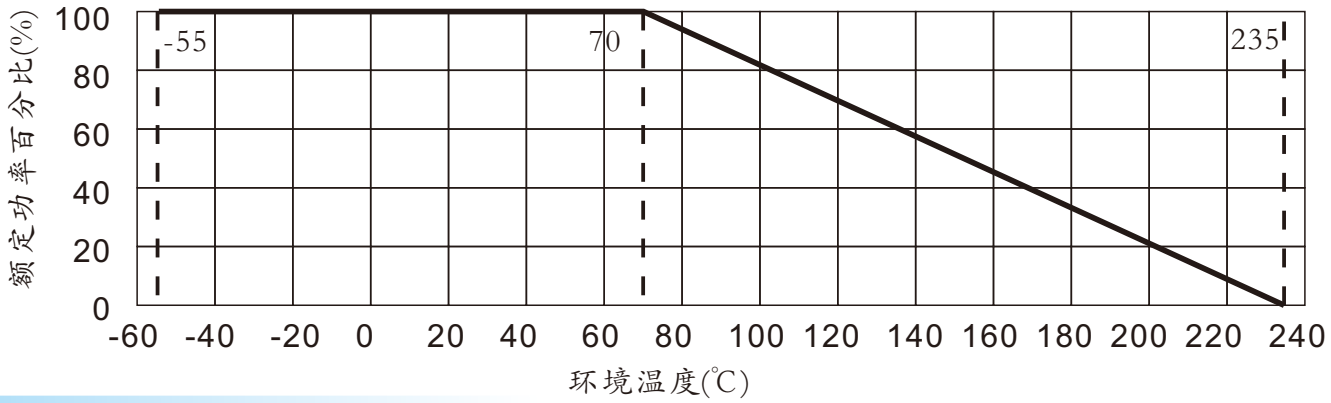
TOMR	5W	K	10
(1)	(2)	(3)	(4)
Series Name	Power Value	Resistance Tolerance	Resistance

(1)Type: TOMV,TMOR
(2)Power Value: 5W,7W(TOMV);3W,5W(TMOR)
(3)Resistance Tolerance: J=±5%,K=±10%
(4)Resistance:10Ω,100Ω,1000Ω…

Reference Standards

JISC 5201-1

Derating Curve



Performance

Test Items	Perfomance	Test Methods(JISC 5201-1)
Temperature Coefficient	±350PPM/℃Max	4.8 natural resistance changes per temp. Degree centigrade $\frac{R2-R1}{R1(t2-t1)} \times 10^6 (PPM/℃)$ R1: Resistance value at room temp. (t1) R2:Resistance value at room temp.+100℃ (t2) Test pattern: room temp. (t1), room temp. +100℃ (t2)
Short-time overload	Resistance change rate is: ±(2%R+0.05Ω)Max for small size.With no evidence of mechanical damage.	4.13 Permanent resistance change after the application of a potential of 2.5 times RCWV for 5 seconds.
Terminal strength	No evidence of mechanical damage	Direct load: Resistance to a 2.5Kg direct load for 10 seconds in the direction of the longitudinal axis of the terminal leads. Twist test: Terminal leads shall be bent through 90° at a point of about 6mm from the body of the resistor and shall be rotated through 360° about the original axis of the bent terminal in alternating direction for a total of 3 rotations.
Load life in humidity	ΔR/R: ±5% for <100KΩ; ±10% for ≧100KΩ	7.9 resistance change after 1,000 hours (1.5 hours "ON",0.5 hour "OFF") at RCWV in a humidity test chamber controlled at 40℃ ±2℃ and 90 to 95% relative humidity.
Load life	ΔR/R: ±5% for <100KΩ; ±10% for ≧100KΩ	4.25.1 permanent resistance change after 1,000 hours operating at RCWV with duty cycle of 1.5 hours "ON", 0.5 hour "OFF" at 70℃ ±2℃ ambient.