

### ■ FEATURES

- High surge Forward current capability
- High efficiency
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7s, per JESD 22-B106

### ■ TYPICAL APPLICATIONS

Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection

### ■ MECHANICAL DATA

- **Package:** R-6  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Color band denotes cathode end

### ■ MAXIMUM RATINGS (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	10A10
Device Marking Code			10A10
Repetitive Peak Reverse Voltage	VRRM	V	1000
Average Rectified Output Current @60Hz sine wave, R-load, T <sub>a</sub> =25°C	I <sub>O</sub>	A	10
Surge(Non-repetitive)Forward Current @60Hz half sine wave, 1 cycle, T <sub>a</sub> =25°C	IFSM	A	325
Current Squared Time @1ms≤t≤8.3ms T <sub>j</sub> =25°C	I <sup>2</sup> t	A <sup>2</sup> s	438
Storage Temperature	T <sub>stg</sub>	°C	-55 ~+150
Junction Temperature @ IN DC Forward Mode-Forward Operations, without reverse bias, t ≤ 1 h (Fig. 1)①	T <sub>j</sub>	°C	-55 ~+200

#### NOTE

① Meets the requirements of IEC 61215 Ed. 2 bypass diode thermal test.

### ■ ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	10A10
Maximum instantaneous forward voltage drop per diode	VFM	V	I <sub>FM</sub> =10.0A	1.1
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM1</sub>	uA	V <sub>RM</sub> =V <sub>RRM</sub> T <sub>a</sub> =25°C	5
	I <sub>RRM2</sub>		V <sub>RM</sub> =V <sub>RRM</sub> T <sub>a</sub> =125°C	200

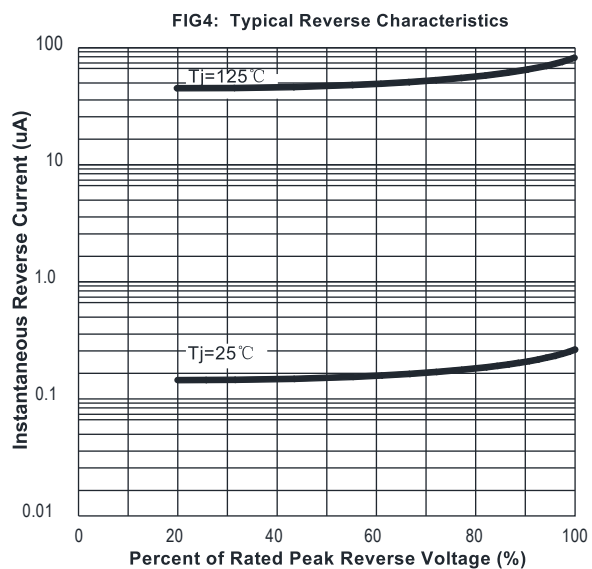
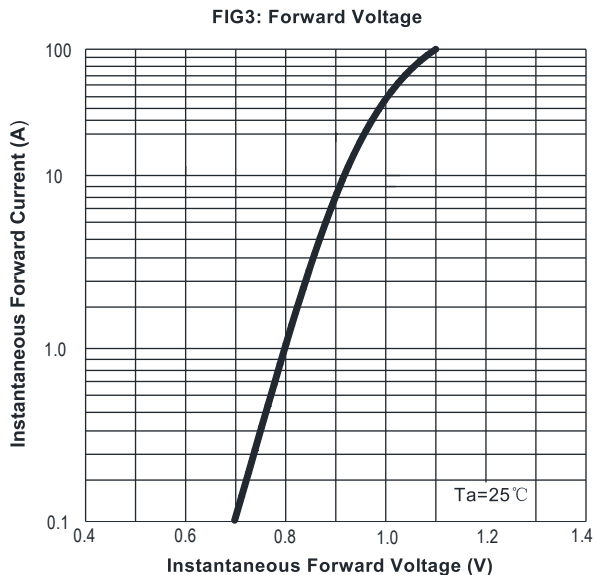
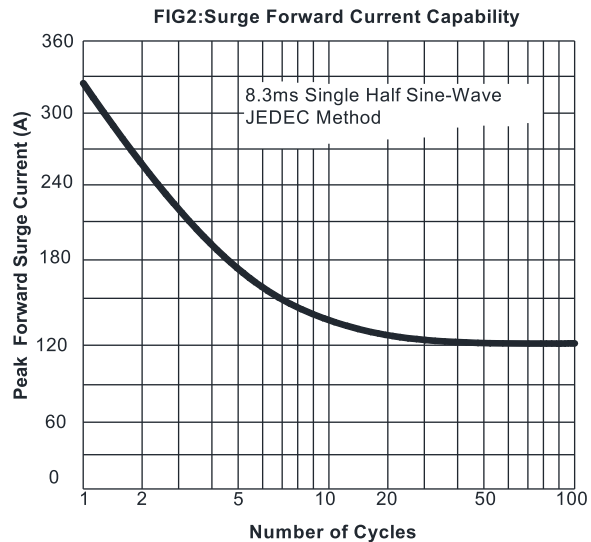
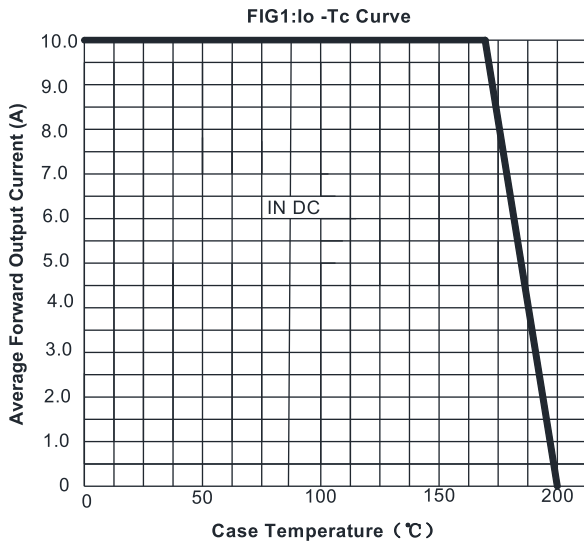
### ■ ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	10A10
Thermal Resistance Between junction and case	R <sub>θJ-C</sub>	°C/W	2.5

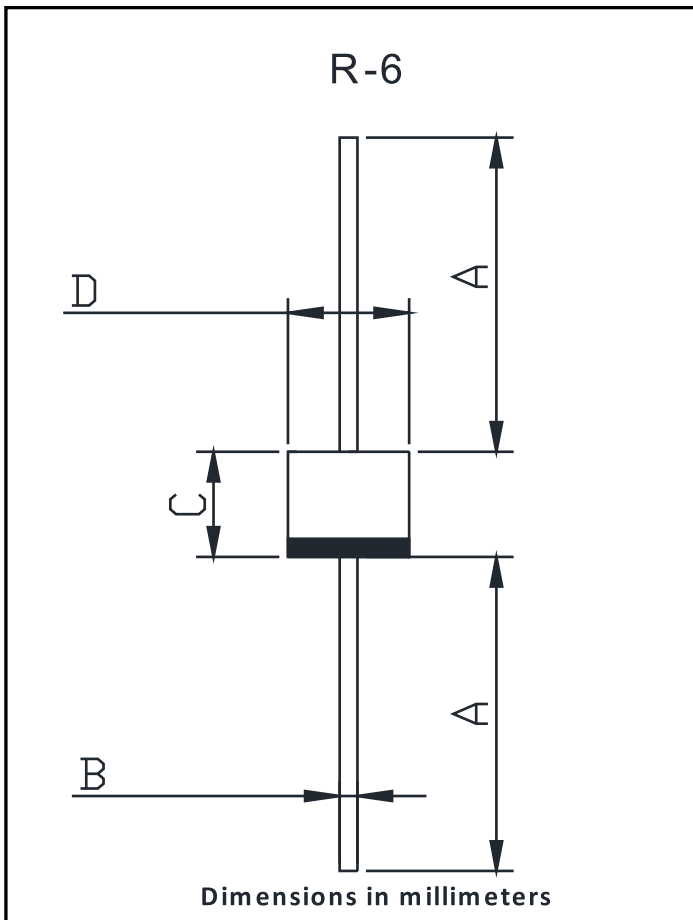
### ■ PACKAGING INFORMATION

PREFERRED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
10A10	Approximate 1.811	500	10	5000	Tape
10A10	Approximate 1.811	1000	4	4000	Reel

### ■ CHARACTERISTICS (TYPICAL)



■ **OUTLINE DIMENSIONS**



R-6		
Dim	Min	Max
A	25.4	/
B	1.2	1.3
C	8.6	9.1
D	8.6	9.1