

### Features

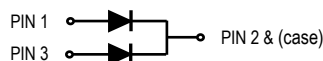
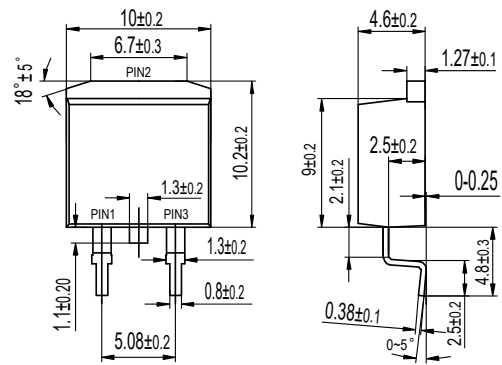
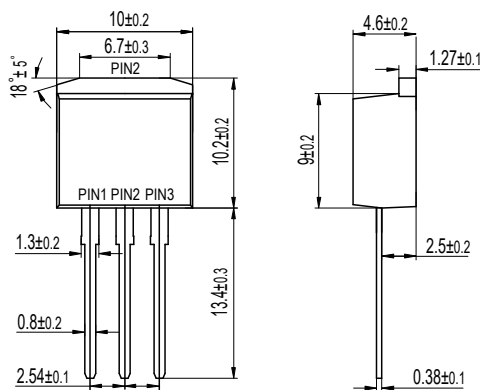
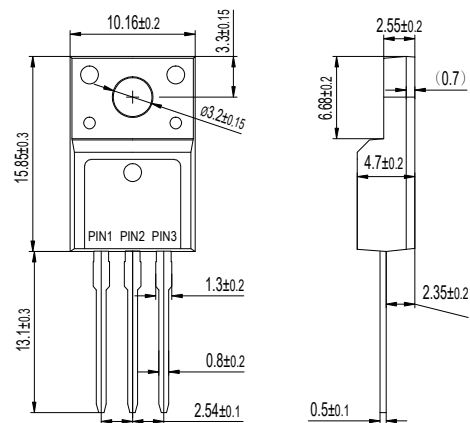
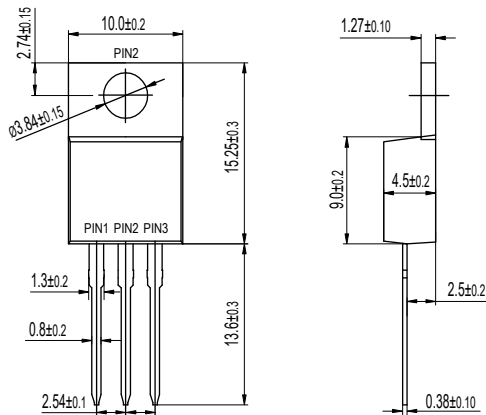
- High efficiency operation
- Low power loss
- Low stored charge majority carrier conduction
- High forward surge capability
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std..(Halogen Free)

### Mechanical Data

- Circuit figure: Common cathode
- Leads: Solderable per mil-std-202, Method 208
- Polarity: as marked
- Mounting torque: 5 in-lbs maximum
- Terminals: Puretin plated
- Weight: TO-220AB 1.85 grams  
 ITO-220AB 1.70 grams  
 TO-262AB 1.45 grams  
 TO-263(D<sup>2</sup>PAK) 1.35 grams

### Package outline

### Dimensions in millimeters



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C)

RATINGS	SYMBOL	SR 2040CT 2040FCT 2040WCT 2040DCT	SR 2045CT 2045FCT 2045WCT 2045DCT	SR 2060CT 2060FCT 2060WCT 2060DCT	SR 20100CT 20100FCT 20100WCT 20100DCT	MBR 20150CT 20150FCT 20150WCT 20150DCT	MBR 20200CT 20200FCT 20200WCT 20200DCT	UNIT	
Maximum repetitive reverse voltage	VRRM	40	45	60	100	150	200	V	
Maximum RMS voltage	VRMS	28	32	42	70	105	140	V	
Maximum DC blocking voltage	VDC	40	45	60	100	150	200	V	
Maximum average forward current per device per diode	I <sub>AV</sub>	20 10							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	200							A
Typical thermal resistance (Note 1)	R <sub>θ-JC</sub>	TO-220AB ITO-220AB TO-262AB TO-263(D <sup>2</sup> PAK)				2.0 4.5 2.5 2.5			°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to +150				-55 to +175		°C	
Storage temperature range	T <sub>STG</sub>	-55 to +175						°C	
CHARACTERISTICS	SYMBOL	SR 2040CT 2040FCT 2040WCT 2040DCT	SR 2045CT 2045FCT 2045WCT 2045DCT	SR 2060CT 2060FCT 2060WCT 2060DCT	SR 20100CT 20100FCT 20100WCT 20100DCT	MBR 20150CT 20150FCT 20150WCT 20150DCT	MBR 20200CT 20200FCT 20200WCT 20200DCT	UNIT	
Maximum forward voltage per leg at I <sub>F</sub> =10A	V <sub>F</sub>	0.65		0.75	0.85	0.95		V	
Maximum average reverse current at rated DC blocking voltage	I <sub>R</sub>	T <sub>J</sub> =25°C T <sub>J</sub> =125°C 0.10 15			0.01 5			mA	

Notes: 1. Thermal resistance from junction to case.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

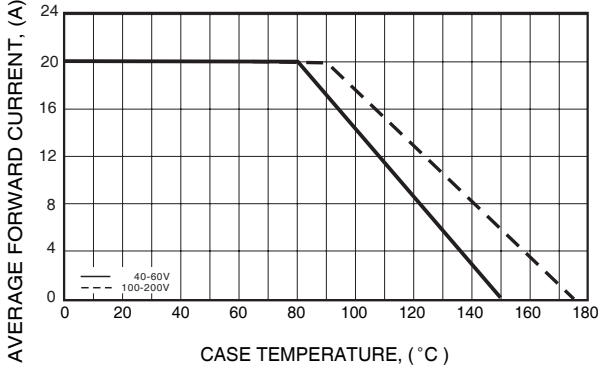


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

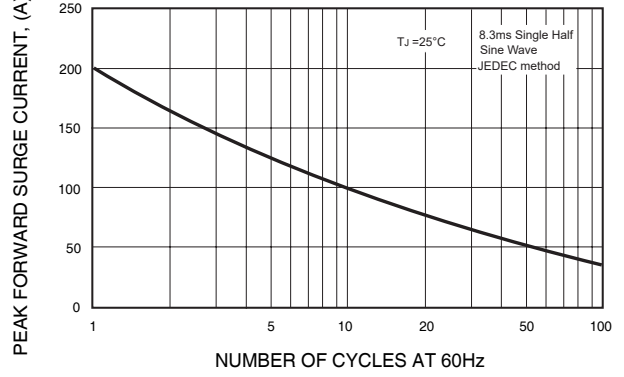


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

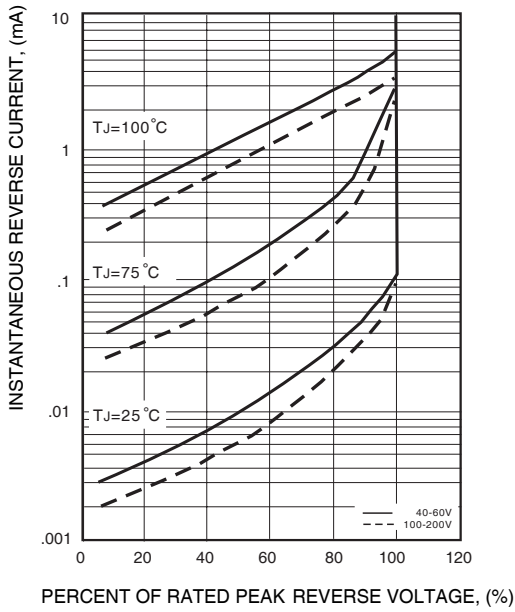


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

