

Features

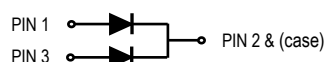
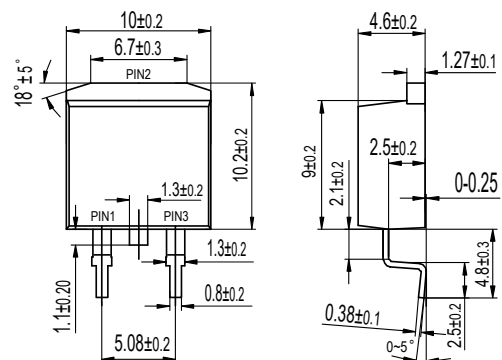
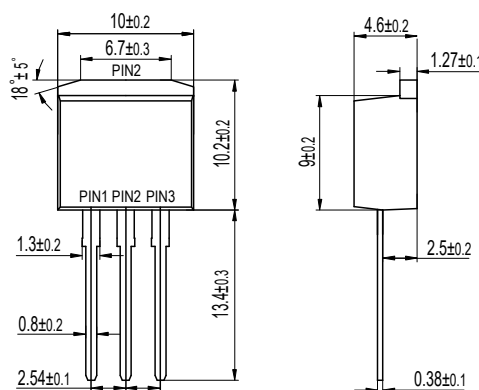
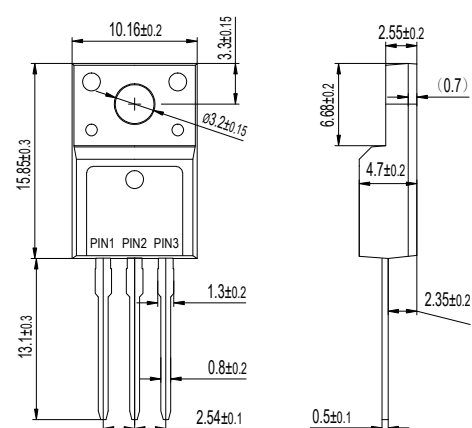
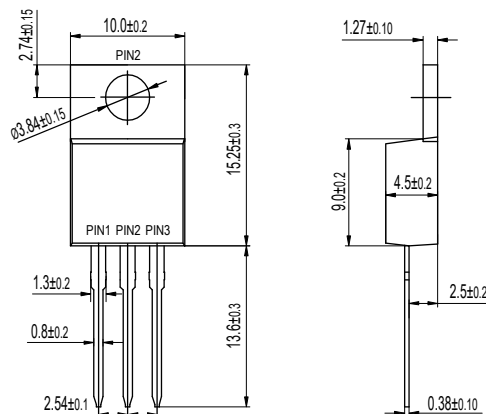
- High efficiency operation
- Low power loss
- Low stored charge majority carrier conduction
- High forward surge capability
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std..(Halogen Free)

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(D²PAK) 1.35 grams

Package outline

Dimensions in millimeters



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

RATINGS	SYMBOL	SR 4040CT 4040FCT 4040WCT 4040DCT	SR 4045CT 4045FCT 4045WCT 4045DCT	SR 4060CT 4060FCT 4060WCT 4060DCT	SR 40100CT 40100FCT 40100WCT 40100DCT	SR 40150CT 40150FCT 40150WCT 40150DCT	SR 40200CT 40200FCT 40200WCT 40200DCT	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 _{AV}	40 20						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	380						A
Typical thermal resistance (Note 1) TO-220AB ITO-220AB TO-262AB TO-263(D ² PAK)	R _{θ-JC}	2.0 4.5 2.5 2.5						°C/W
Operating junction temperature range	T _J	-55 to +150				-55 to +175		°C
Storage temperature range	T _{STG}	-55 to +175						°C
CHARACTERISTICS	SYMBOL	SR 3040CT 3040FCT 3040WCT 3040DCT	SR 3045CT 3045FCT 3045WCT 3045DCT	SR 3060CT 3060FCT 3060WCT 3060DCT	SR 30100CT 30100FCT 30100WCT 30100DCT	SR 30150CT 30150FCT 30150WCT 30150DCT	SR 30200CT 30200FCT 30200WCT 30200DCT	UNIT
Maximum forward voltage per leg at I _F =20A	V _F	0.65		0.75	0.85	0.95		V
Maximum average reverse current at rated DC blocking voltage T _J =25°C T _J =125°C	I _R	0.10 15			0.02 8			mA

Notes: 1. Thermal resistance from junction to case.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

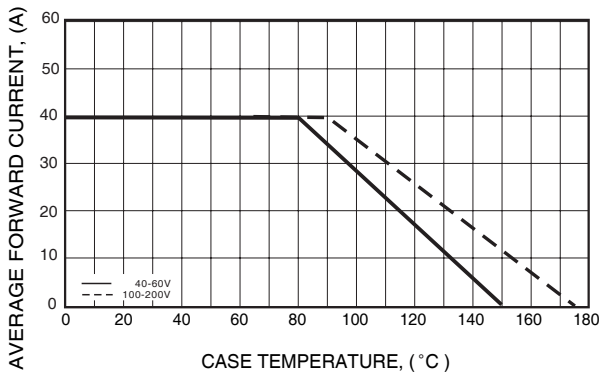


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

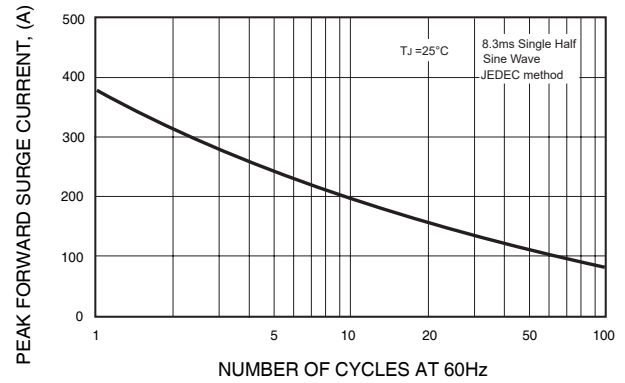


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

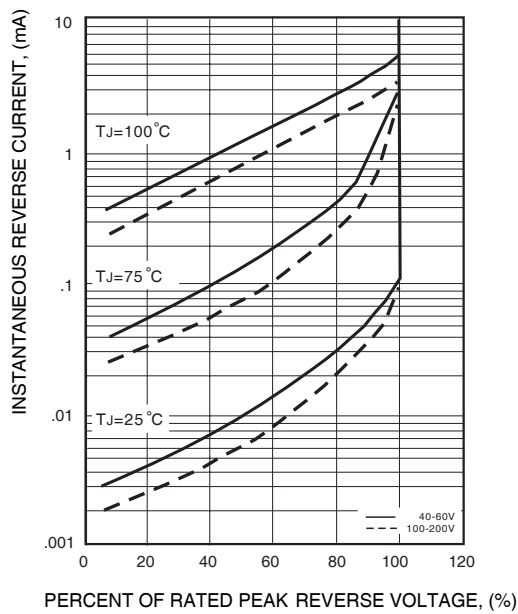


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

