

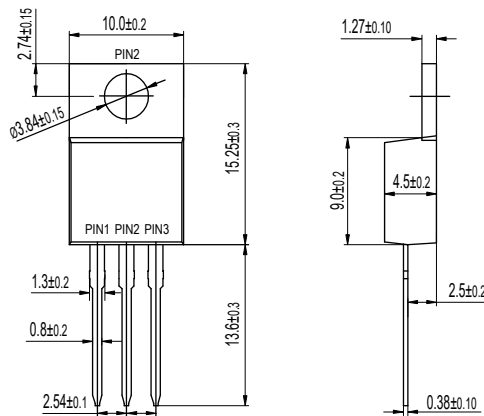
Features

- Glass passivated chip junctions
- Super fast recovery time for switching mode application
- High Forward Surge Capability
- Low Reverse Current
- Lead free in compliance with EU RoHS 2011/65/EU directive

Mechanical Data

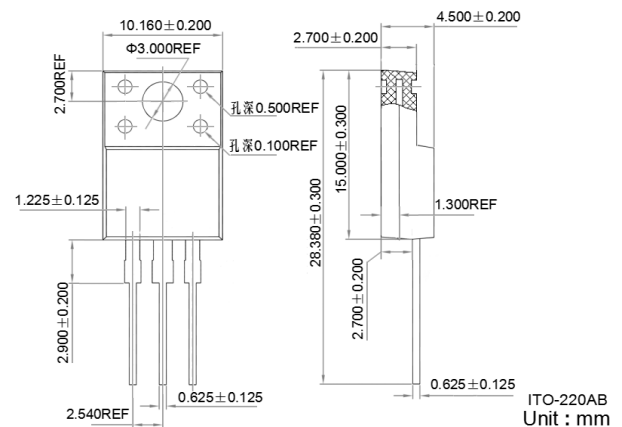
- Circuit figure: Common Cathode
- Leads: Solderable per mil-std-202, Method 208
- Polarity: as marked
- Mounting torque: 5 in-lbs maximum
- Terminals: Puretin plated
- Weight: TO-220AB 1.85 grams
ITO-220AB 1.70 grams

Package outline

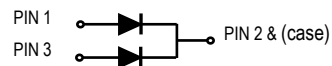


TO-220AB
MUR20XXCT

Dimensions in millimeters



ITO-220AB
MUR20XXFCT



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

RATINGS	SYMBOL	MUR 2010CT 2010FCT	MUR 2020CT 2020FCT	MUR 2030CT 2030FCT	MUR 2040CT 2040FCT	MUR 2050CT 2050FCT	MUR 2060CT 2060FCT	UNIT
Maximum repetitive reverse voltage	VRRM	100	200	300	400	500	600	V
Maximum RMS voltage	VRMS	70	140	210	280	350	420	V
Maximum DC blocking voltage	VDC	100	200	300	400	500	600	V
Maximum average forward current	IAV	20						A
Peak forward surge current,8.3ms single half sine-wave superimposed on rated load	IFSM	300						A
Typical thermal resistance per diode(Note 1)	TO-220AB ITO-220AB TO-262AB TO-263(D ² PAK)	2.5 4.0 2.5 2.5						°C/W
Operating junction temperature range	TJ	-55 to +150						°C
Storage temperature range	TSTG	-55 to +150						°C
CHARACTERISTICS	SYMBOL	MUR 2010CT 2010FCT	MUR 2020CT 2020FCT	MUR 2030CT 2030FCT	MUR 2040CT 2040FCT	MUR 2050CT 2050FCT	MUR 2060CT 2060FCT	UNIT
Typical forward voltage per leg at 10A	VF	1.0		1.3		1.7		V
Maximum average reverse current at rated DC blocking voltage	TJ=25°C TJ=125°C IR	5 250						μA
Typical reverse recovery time(Note 2)	TRR	35						nS

Notes: 1. Thermal resistance from junction to case.

2. Test conditions: IF=0.5A, IR=1.0A, IRR=0.25A.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

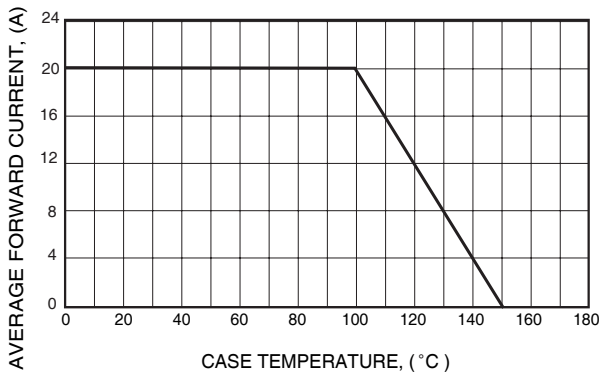


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

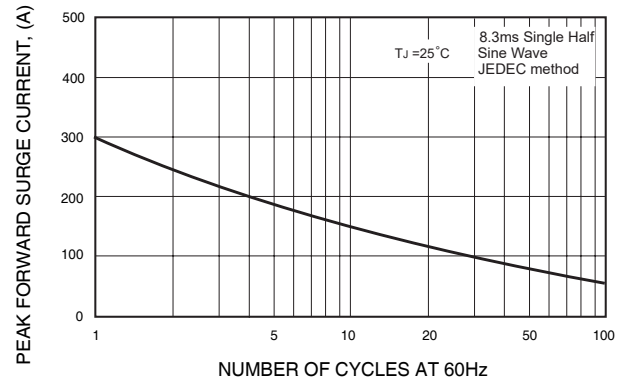


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

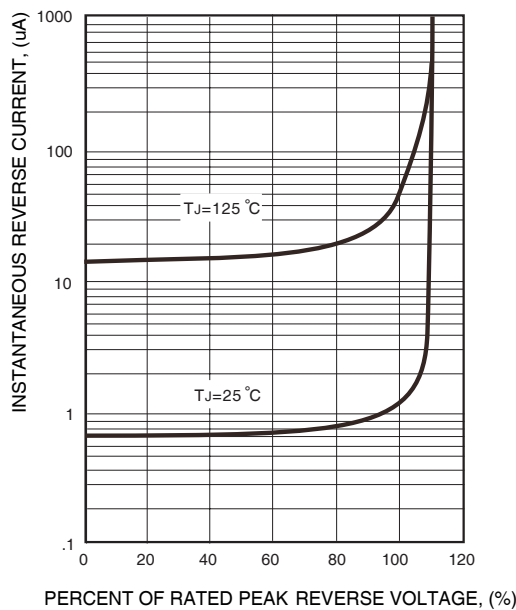


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

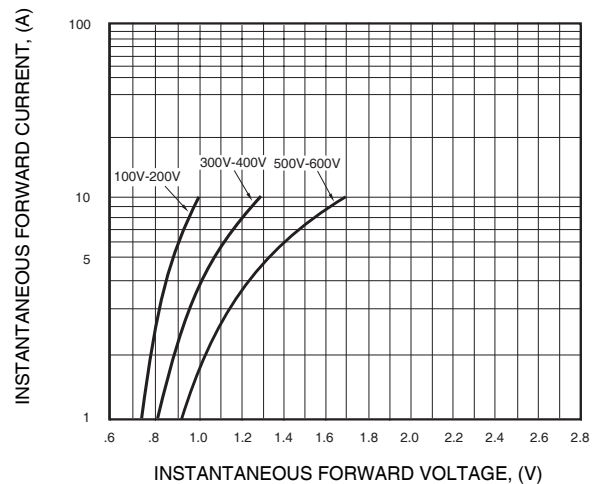
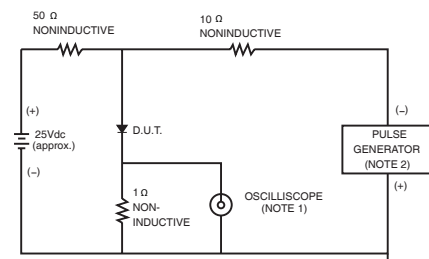


FIG. 6- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

