

MUR20CT Series High Efficiency Rectifiers

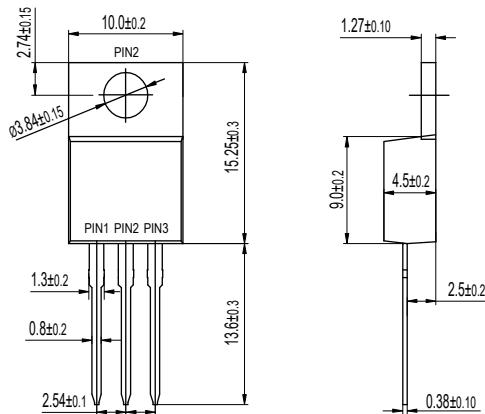
Features

- Glass passivated chip junctions
- High Speed 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

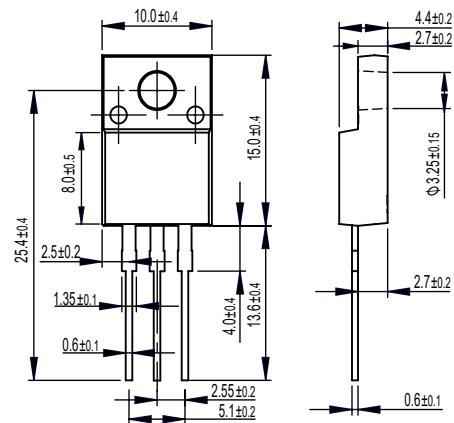
- Circuit figure: Common cathode
- Leads: Solderable per mil-std-202, Method 208
- Polarity: as marked
- Mounting torque: 5 in-lbs maximum
- Terminals: Puretin plated
- Weight: TO-220AB 1.85 grams
ITO-220AB 1.70 grams

Package outline

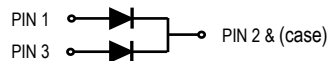


TO-220AB
MUR20XXCT

Dimensions in millimeters



ITO-220AB
MUR20XXFCT



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

RATINGS	SYMBOL	MUR 2020CT	MUR 2030CT	MUR 2040CT	MUR 2060CT	MUR 2080CT	MUR 20100CT	UNIT
		2020FCT	2030FCT	2040FCT	2060FCT	2080FCT	20100FCT	
Maximum repetitive reverse voltage	VRRM	200	300	400	600	800	1000	V
Maximum RMS voltage	VRMS	140	210	280	420	560	700	V
Maximum DC blocking voltage	VDC	200	300	400	600	800	1000	V
Maximum average forward current per device per diode	I _{AV}	20 10						A
Peak forward surge current,8.3ms single half sine-wave superimposed on rated load	I _{FSM}	300						A
Typical thermal resistance per diode(Note 1)	R _{θ-JC}	2.5 4.5						°C/W
Operating junction temperature range	T _J	-55 to +150						°C
Storage temperature range	T _{STG}	-55 to +150						°C
CHARACTERISTICS	SYMBOL	MUR 2020CT	MUR 2030CT	MUR 2040CT	MUR 2060CT	MUR 2080CT	MUR 20100CT	UNIT
		2020FCT	2030FCT	2040FCT	2060FCT	2080FCT	20100FCT	
Typical forward voltage per leg at 10A	V _F	1.00	1.30		1.70			V
Maximum average reverse current at rated DC blocking voltage T _J =25°C T _J =125°C	I _R	5 250						μA
Maximum reverse recovery time(Note 2)	T _{RR}	50				100		nS

Notes: 1. Thermal resistance from junction to case.
2. Test conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

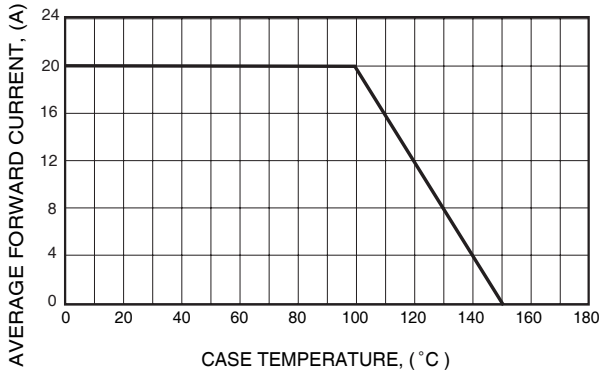


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

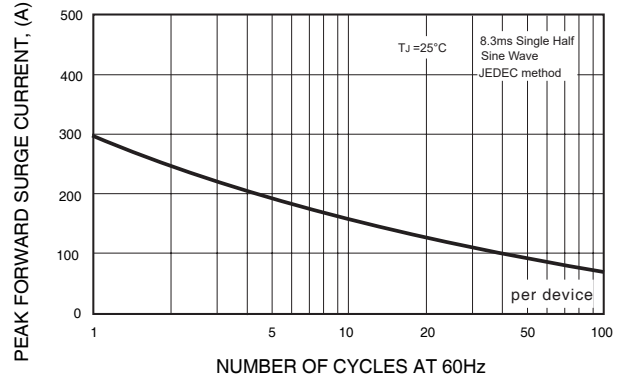


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

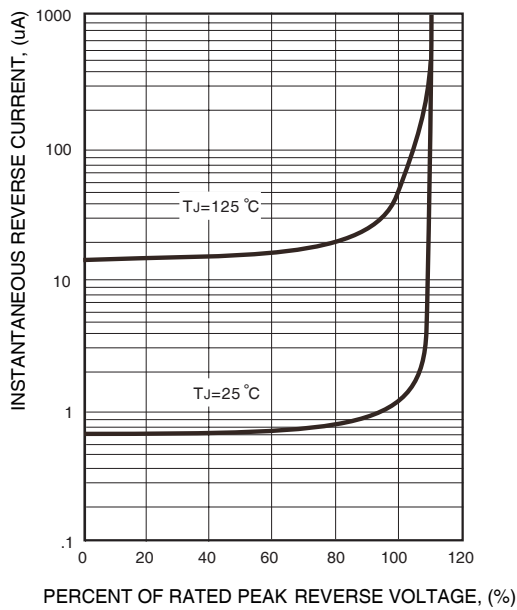


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

