

MUR1020 - MUR1060

Ultra-Fast Recovery Rectifiers

PRV : 200-600 Volts

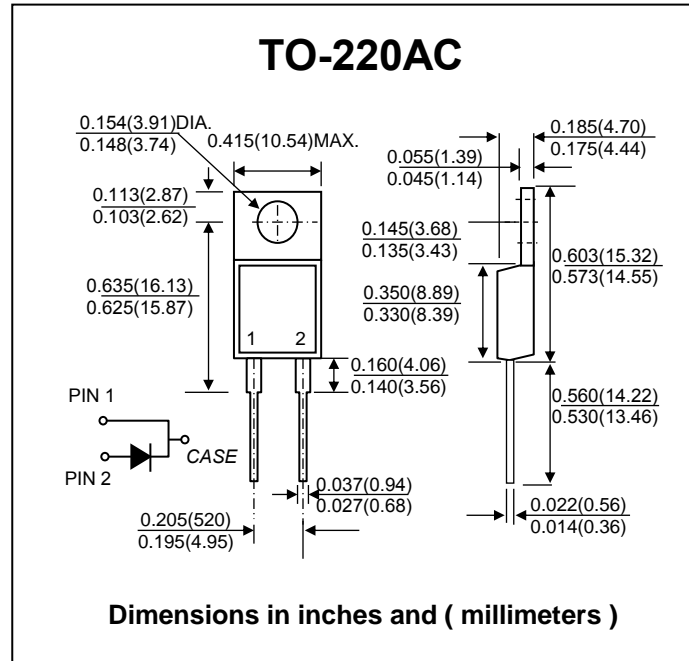
Io : 10 Ampere

FEATURES :

- * High frequency operation
- * High surge forward current capability
- * 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. 7 s, per JESD 22-B106
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case :TO-220AC
Molding compound meets UL 94 V-0 flammability rating
- * Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- * Polarity: As marked
- * Weight : 1.8 grams (Approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	MUR1020	MUR1040	MUR1060	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	200	400	600	V
Maximum Average Forward Current @60Hz Sine wave, R-load, T _c (Fig1.)	I _{F(AV)}	10			A
Surge(Non-repetitive)Forward Current @60Hz Sine wave, 1 Cycle, T _a =25°C	I _{FSM}	125			A
Current Squared Time @ 1ms≤t≤8.3ms T _j =25°C	I ² t	65			A ² s
Maximum Instantaneous Forward Voltage per diode at I _F = 10.0 A	V _F	0.975	1.25	1.5	V
Maximum Reverse Current at Rated DC T _a = 25 °C	I _R	10			μA
Blocking Voltage per diode T _a = 125 °C	I _{R(H)}	500			μA
Reverse Recovery Time (Note1)	T _{rr}	50			ns
Typical Thermal Resistance from Junction to Case	R _{θJC}	2.0			°C/W
Junction Temperature Range	T _J	- 55 to + 150			°C
Storage Temperature Range	T _{STG}	- 55 to + 150			°C

Note :

(1) Reverse Recovery Test Conditions : I_F = 0.5A, I_R = 1A ; I_{rr} = 0.25 A

RATING AND CHARACTERISTIC CURVES (MUR1020 - MUR1060)

FIG.1 - FORWARD CURRENT DERATING CURRENT

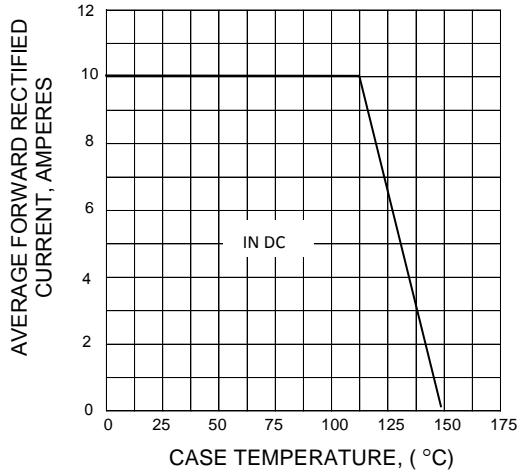


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

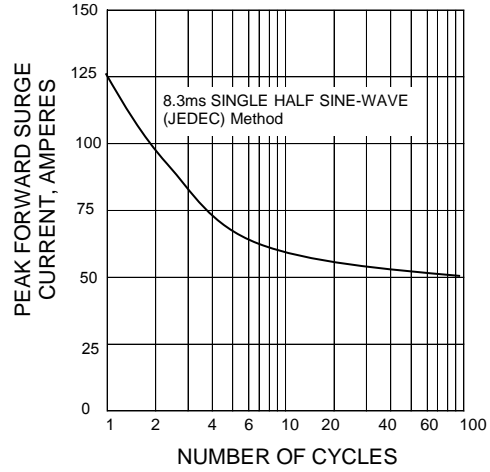


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

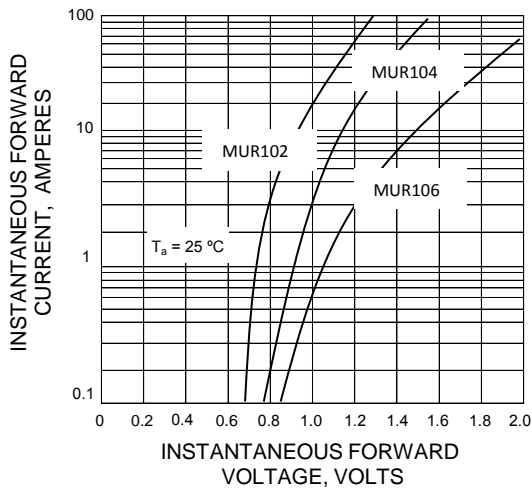


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

