

# MUR1005~MUR1060

## SUPERFAST RECOVERY RECTIFIER

**VOLTAGE** 50 to 600 Volt **CURRENT** 10 Ampere

TO-220AC

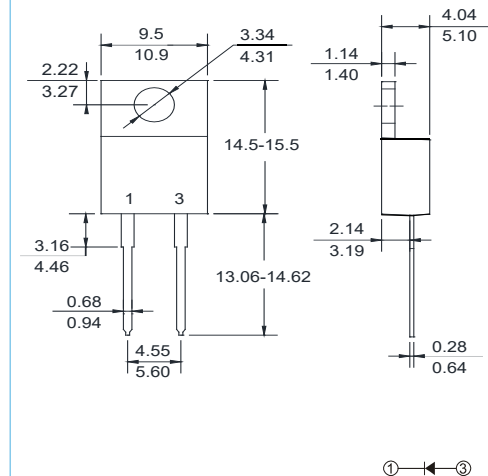
Unit:mm

### FEATURES

- Super fast switching time for high efficiency
- High surge capacity
- High surge capability.
- Lead free in compliance with EU RoHS

### MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	MUR1005	MUR1010	MUR1020	MUR1040	MUR1060	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	V
Maximum Average Forward Current at See Fig 1	$I_{F(AV)}$	10					A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	100					A
Maximum Forward Voltage at 10 A (Note 1)	$V_F$	1.3		1.5		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=125^{\circ}C$	$I_R$	5 250					$\mu A$
Maximum Reverse Recovery Time (Note 1)	$t_{rr}$	35		50		ns	
Typical Junction Capacitance (Note 2)	$C_J$	160					pF
Typical thermal Resistance (Note 3)	$R_{\theta JA}$	8					$^{\circ}C / W$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150					$^{\circ}C$

### NOTES:

1. Pulse Test with  $PW=300\mu sec$ , 2% Duty Cycle.
2. Reverse Recovery Test Conditions :  $I_F=0.5A, I_R=1A, I_{rr}=0.25A$
3. Mounted on P.C. Board with  $14mm^2$  (0.013mm thick) copper pad areas.

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## RATING AND CHARACTERISTIC CURVES

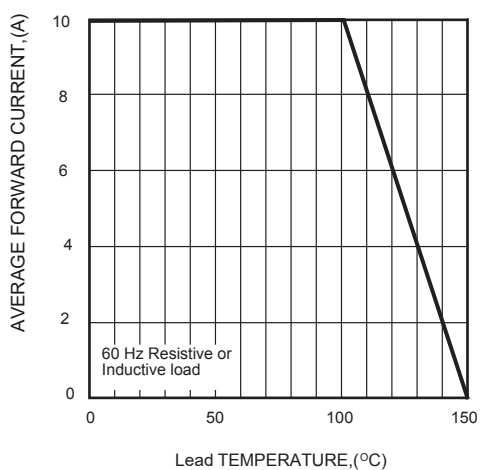


Fig. 1 Forward Current Derating Curve

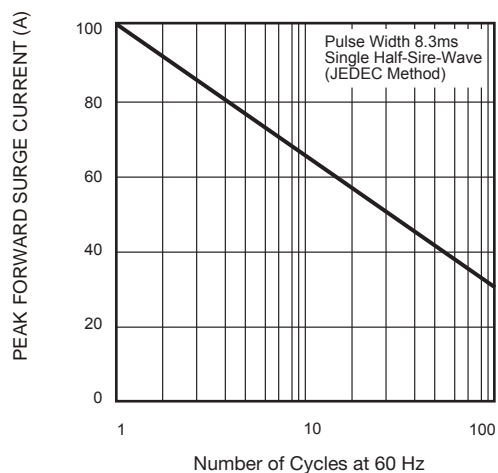


Fig. 2 Surge Current Derating Curve

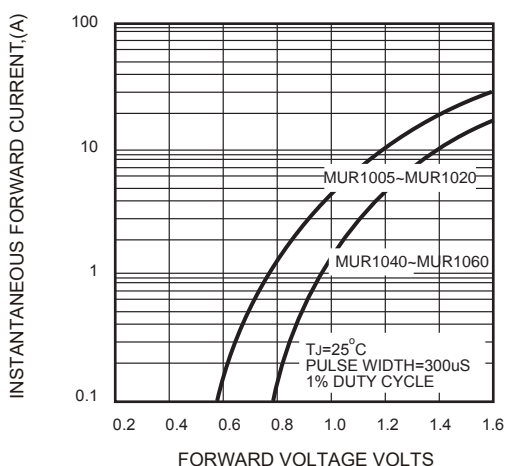


Fig. 3 Typical Forward Characteristics

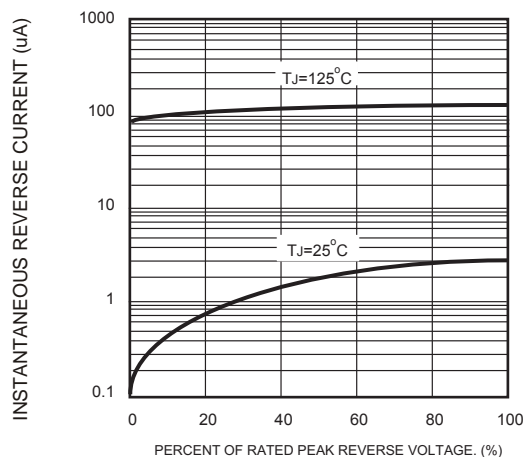


Fig. 4 Typical Reverse Characteristics

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### ORDER INFORMATION

- Packing information

Part Number	Case	DELIVERY MODE	QUANTITY
MUR1005~MUR1060	TO-220AC	Tube	1000/BOX