

MUR820 thru MUR860

Reverse Voltage 200V--600 V

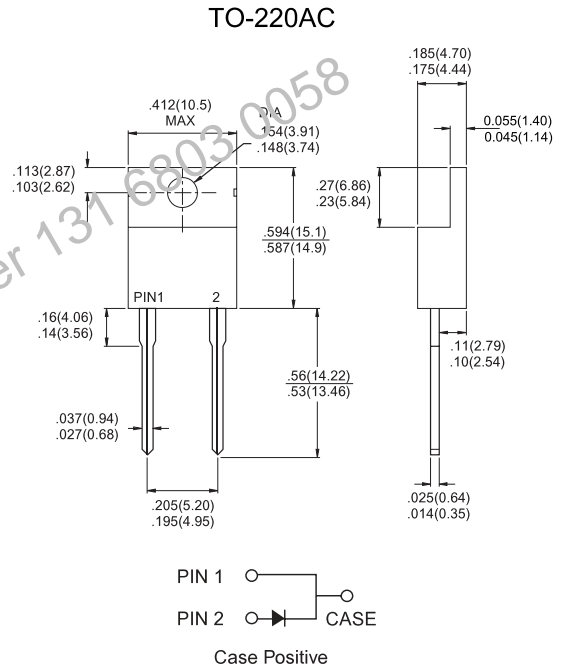
Forward Current 8.0 A

Features

- ✧ High efficiency, Low VF
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability
- ✧ For use in low voltage, high frequency inverter, free wheeling, and polarity protection application.
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode

Mechanical Data

- ✧ Case: TO-220AC molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Terminals: Pure tin plated leads, lead free, solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: As marked
- ✧ High temperature soldering guaranteed: 260°C/10s/.25", (6.35mm) from case.
- ✧ Weight:1.9 grams



Maximum Ratings and Electrical Characteristics

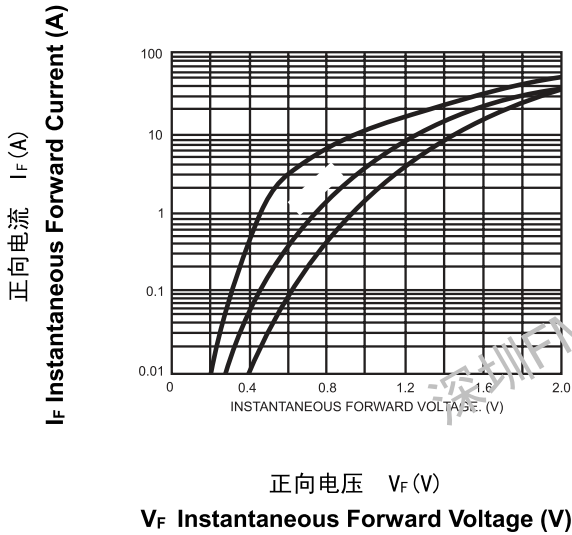
Rating at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbol	MUR820	MUR840	MUR860	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	200	400	600	V
Maximum RMS Voltage	$V_{RMS}$	140	280	420	V
Maximum DC Blocking Voltage	$V_{DC}$	200	400	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	8			A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	$I_{FSM}$	100			A
Maximum Instantaneous Forward Voltage (Note 1) @ 8 A	$V_F$	1.0	1.30	1.70	V
Maximum Reverse Current @ $T_A=25\text{ }^\circ\text{C}$ @ $T_A=100\text{ }^\circ\text{C}$	$I_R$	10 250			$\mu\text{A}$ $\mu\text{A}$
Maximum Reverse Recovery Time (Note 2)	$T_{rr}$	25	50		ns
Typical Thermal Resistance	$R_{\theta JC}$	3	2		$^\circ\text{C/W}$
Operating Temperature Range	$T_J$	-55 to + 175			$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to + 175			$^\circ\text{C}$

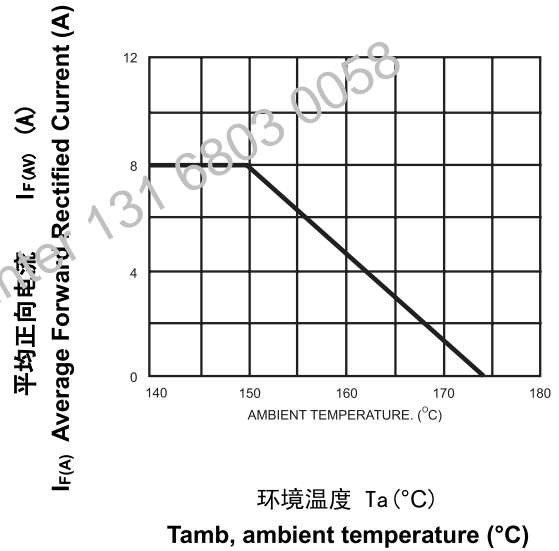
Note 1: Pulse test:  $t_p = 300\mu\text{s}$ , Duty Cycle<1%

Note 2: Reverse Recovery Test Condition:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $IRR=0.25\text{A}$

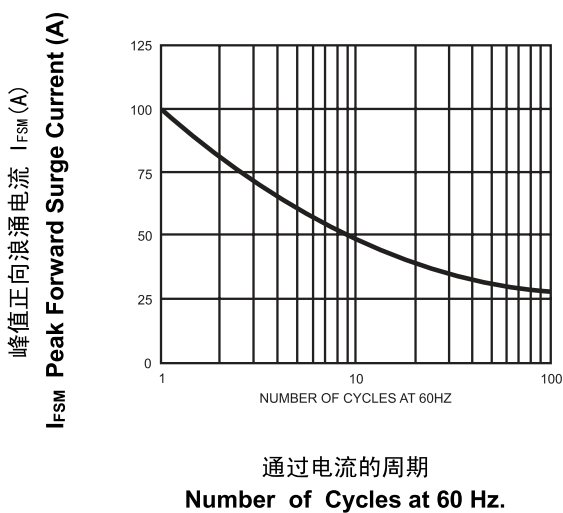
TYPICAL FORWARD CHARACTERISTIC



FORWARD CURRENT DERATING CURVE



MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



TYPICAL RECERSE CHARACTERISTICS

