

FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability
- * Epitaxial construction

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: As Marked
- * Mounting position: Any
- * Weight: 1.5 grams

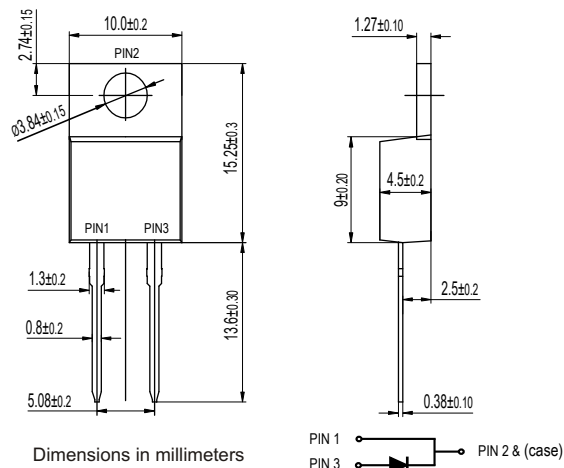
VOLTAGE RANGE

600 Volts

CURRENT

15.0 Amperes

TO-220AC



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

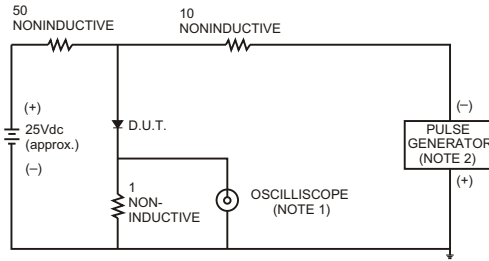
TYPE NUMBER	MUR1560	UNITS
Maximum Recurrent Peak Reverse Voltage	600	V
Maximum RMS Voltage	420	V
Maximum DC Blocking Voltage	600	V
Maximum Average Forward Rectified Current		
.375"(9.5mm) Lead Length at Ta=50°C	15.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	200	A
Maximum Instantaneous Forward Voltage at 15.0A	1.9	V
Type at 15.0A	1.55	
Type at 10.0A	1.4	
Type at 5.0 A	1.2	
Maximum DC Reverse Current Ta=25°C	5	μA
at Rated DC Blocking Voltage Ta=100°C	100	μA
Maximum Reverse Recovery Time (Note 1)	35	nS
Typical Junction Capacitance (Note 2)	65	pF
Typical Thermal Resistance RθJ-C (Note 3)	1.8	°C/W
Typical Thermal Resistance RθJ-A (Note 4)	50	°C/W
Reverse recovery charge Q _{rr}	150	nC
Operating and Storage Temperature Range T _J , T _{STG}	-65 — +175	°C

NOTES:

- Reverse Recovery Time test condition: $IF=0.5A$, $IR=1.0A$, $IRR=0.25A$
- Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- Between junction and case
- Between junction and Air

RATING AND CHARACTERISTIC CURVES (MUR1560)

FIG.1- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



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

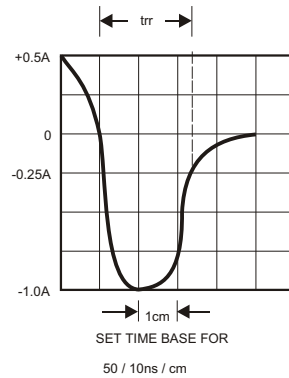


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

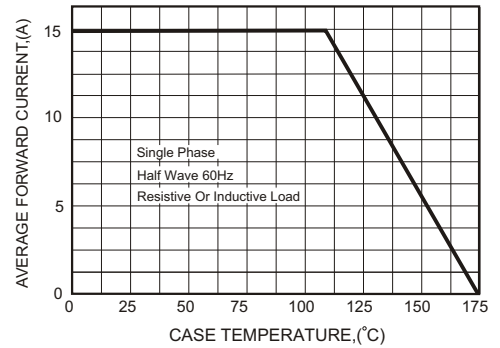


FIG.3-TYPICAL FORWARD CHARACTERISTICS

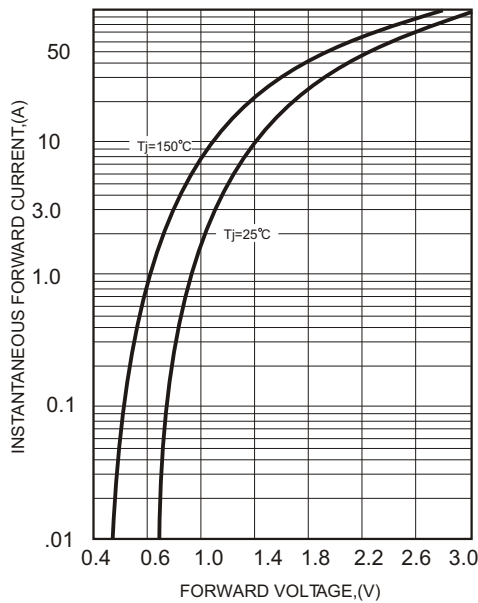


FIG.4-TYPICAL REVERSE CHARACTERISTICS

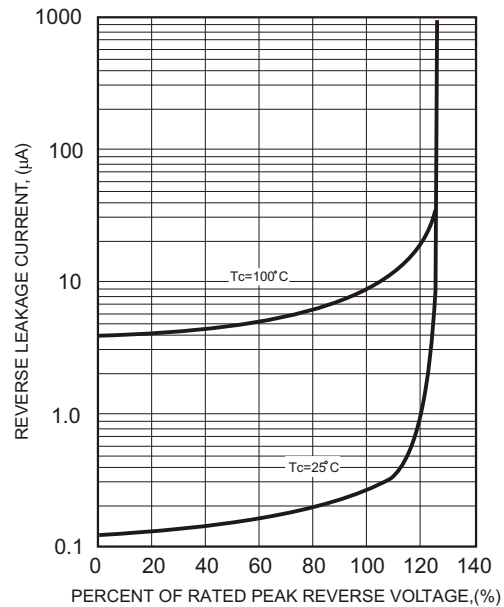


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

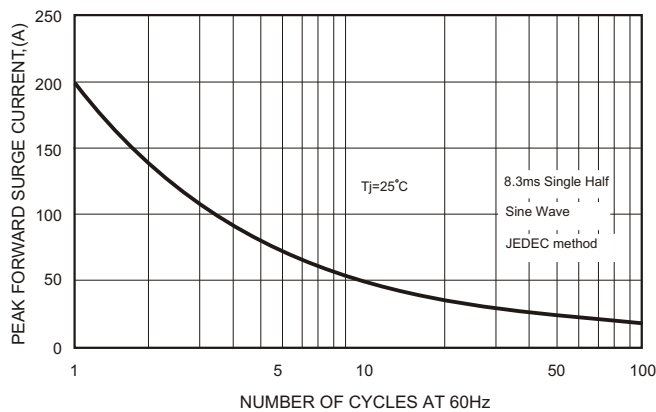


FIG.6-TYPICAL JUNCTION CAPACITANCE

