

MUR520 THRU MUR560

5.0 AMP SURFACE MOUNT SUPER FAST RECTIFIERS

FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Fast switching speed

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: 2.24 grams

VOLTAGE RANGE

200 to 600 Volts

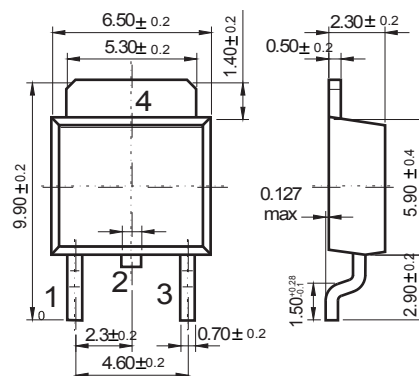
CURRENT

5.0 Ampere



TO-252

Unit: mm



Dimensions in inches and (millimeters)

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%.

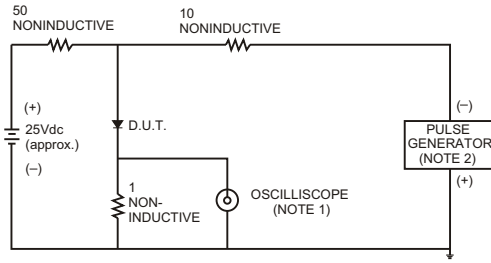
TYPE NUMBER	MUR520	MUR540	MUR560	UNITS
Maximum Recurrent Peak Reverse Voltage	200	400	600	V
Maximum RMS Voltage	140	280	420	V
Maximum DC Blocking Voltage	200	400	600	V
Maximum Average Forward Rectified Current at T _L =100°C	5.0			A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	120			A
Maximum Instantaneous Forward Voltage at 5.0A	1.0	1.25	1.7	V
Maximum DC Reverse Current Ta=25°C	5.0			μA
at Rated DC Blocking Voltage Ta=100°C	150			μA
Maximum Reverse Recovery Time (Note 1)	35			nS
Typical Junction Capacitance (Note 2)	50			pF
Operating and Storage Temperature Range T _J , T _{STG}	-65 — +150			°C

NOTES:

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

RATING AND CHARACTERISTIC CURVES (MUR520 THRU MUR560)

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

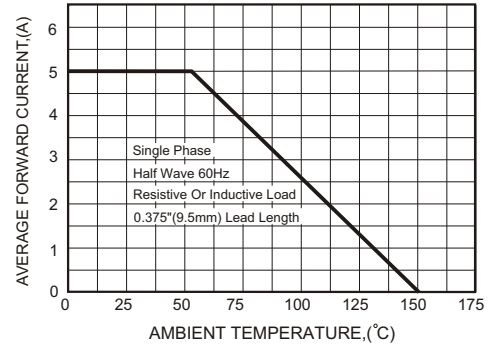


FIG.3-TYPICAL FORWARD CHARACTERISTICS

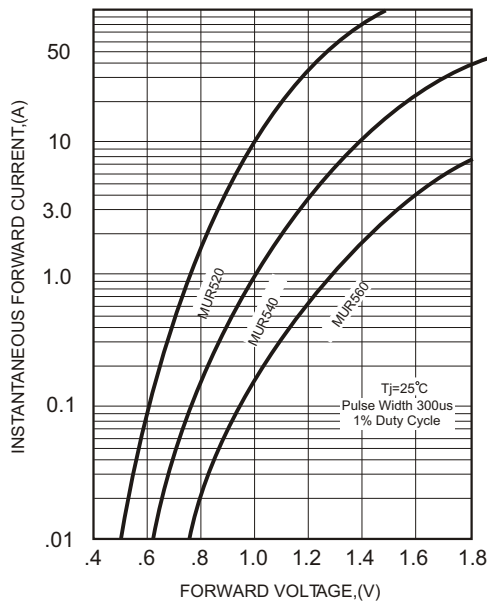


FIG.4-TYPICAL REVERSE CHARACTERISTICS

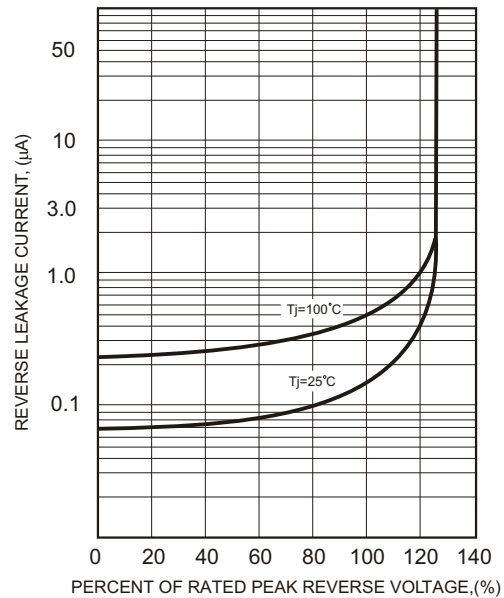


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

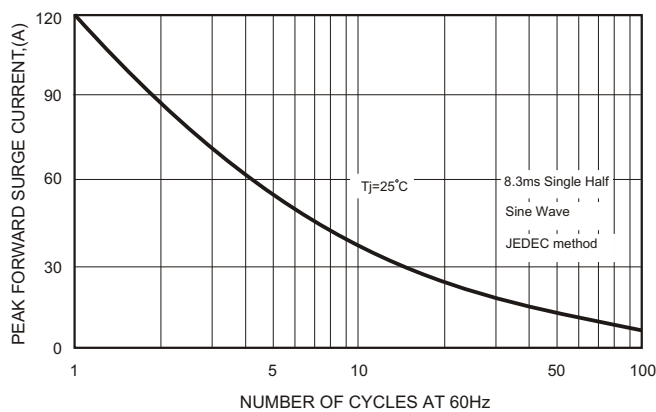


FIG.6-TYPICAL JUNCTION CAPACITANCE

