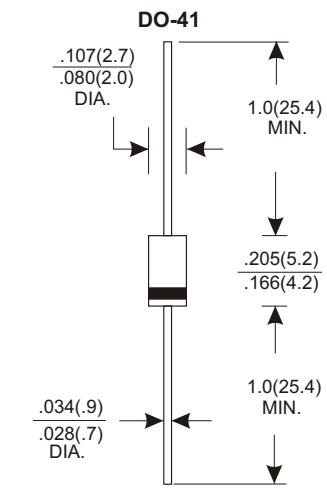




 FEATURES * Low forward voltage drop * High current capability * High reliability * High surge current capability MECHANICAL DATA * Case: Molded plastic * Epoxy: UL 94V-0 rate flame retardant * Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed * Polarity: Color band denotes cathode end * Mounting position: Any * Weight: 0.34 grams	VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere  Dimensions in inches and (millimeters)
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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	MUR105	MUR110	MUR120	MUR130	MUR140	MUR160	MUR180	MUR1100E	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	300	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at Ta=55°C	1.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	30								A
Maximum Instantaneous Forward Voltage at 1.0A	1.0			1.3		1.7			V
Maximum DC Reverse Current Ta=25°C	5.0								µA
at Rated DC Blocking Voltage Ta=100°C	100								µA
Maximum Reverse Recovery Time (Note 1)	45		60			75			nS
Typical Junction Capacitance (Note 2)	20					15			pF
Operating Temperature Range Tj	-65 — +125								°C
Storage Temperature Range Tstg	-65 — +150								°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.

RATING AND CHARACTERISTIC CURVES (MUR105 THRU MUR1100E)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

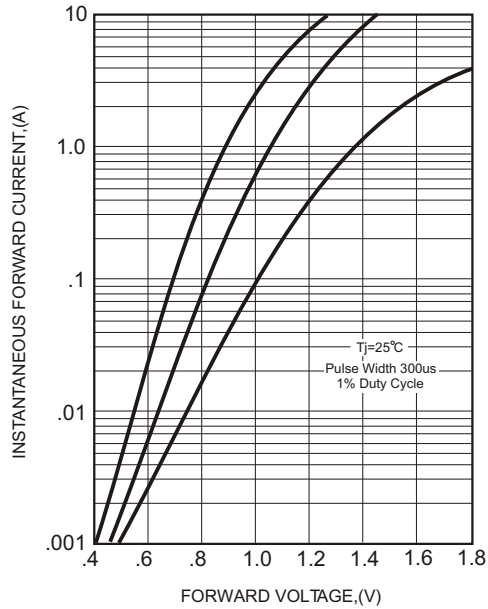


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

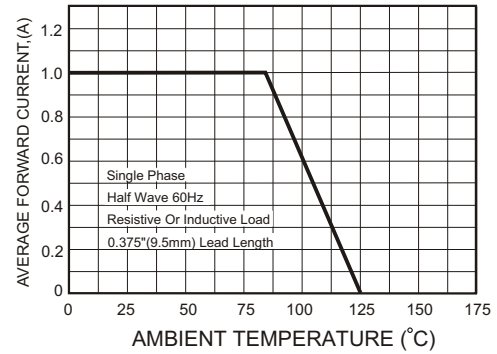
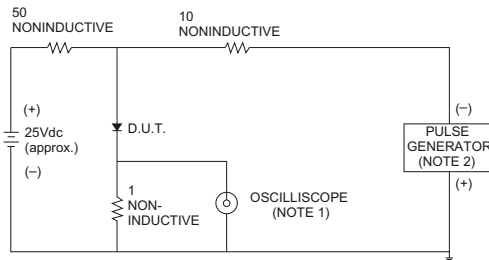


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

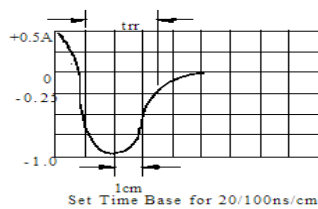


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

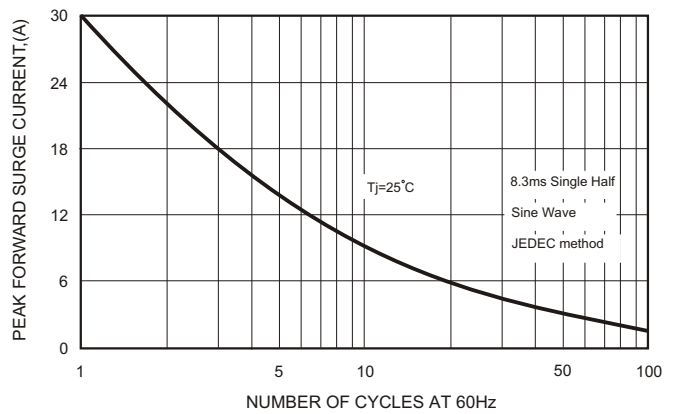


FIG.5-TYPICAL JUNCTION CAPACITANCE

