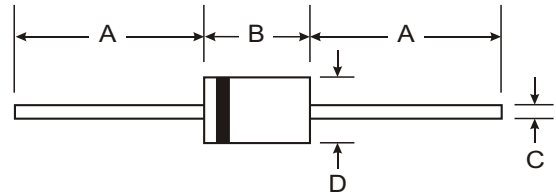
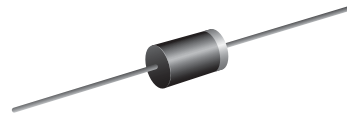


VOLTAGE RANGE: 50 - 600 V
CURRENT: 1.0 A

Features

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with alcohol, Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-0



Mechanical Data

- Case: DO-41, molded plastic
- Terminals: Axial lead, solderable per
- MIL-STD-202, Method 208
- Polarity: Color band denotes cathode
- Weight: 0.012 ounces, 0.34 grams
- Mounting position: Any



DO-41		
Dim	Min	Max
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25 °C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	MUR 105	MUR 110	MUR 115	MUR 120	MUR 130	MUR 140	MUR 150	MUR 160	UNITS	
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	150	200	300	400	500	600	V	
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	350	420	V	
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	500	600	V	
Maximum average forward rectified current 9.5mm lead length, @T _A =75°C	I _{F(AV)}	1.0								A	
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load @T _J =125°C	I _{FSM}	35.0								A	
Maximum instantaneous forward voltage @ 1.0A	V _F	0.875			1.2			1.25		V	
Maximum reverse current @T _A =25°C at rated DC blocking voltage @T _A =100°C	I _R	10.0				100.0					μA
Maximum reverse recovery time (Note1)	t _{rr}	25				50					ns
Typical junction capacitance (Note2)	C _J	22									pF
Typical thermal resistance (Note3)	R _{θJA}	50									°C/W
Operating junction temperature range	T _J	- 55 ----- + 150									°C
Storage temperature range	T _{STG}	- 55 ----- + 150									°C

NOTE: 1. Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.

2. Measured at 1.0MHz and applied reverse voltage of 4.1V DC.

3. Thermal resistance from junction to ambient.



FIG.1 – TYPICAL FORWARD CHARACTERISTICS

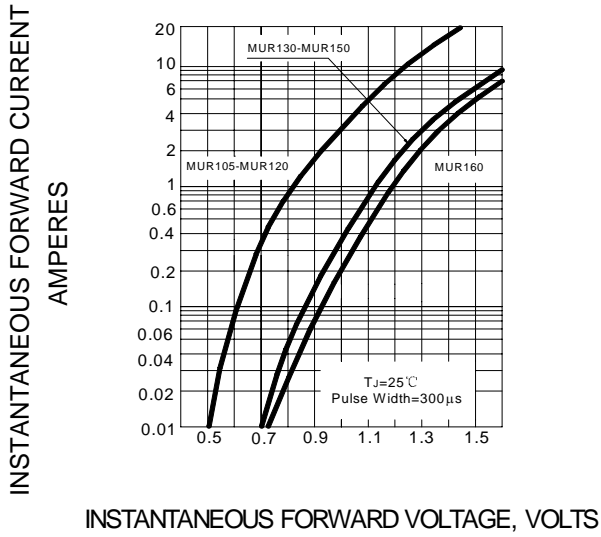


FIG.2 – FORWARD DRATING CURVE

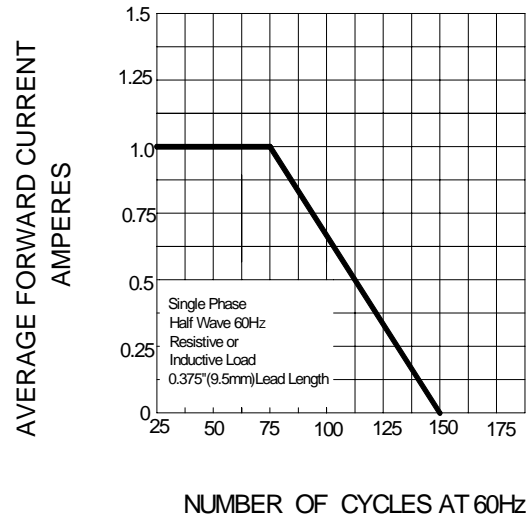


FIG.3 – TYPICAL JUNCTION CAPACITANCE

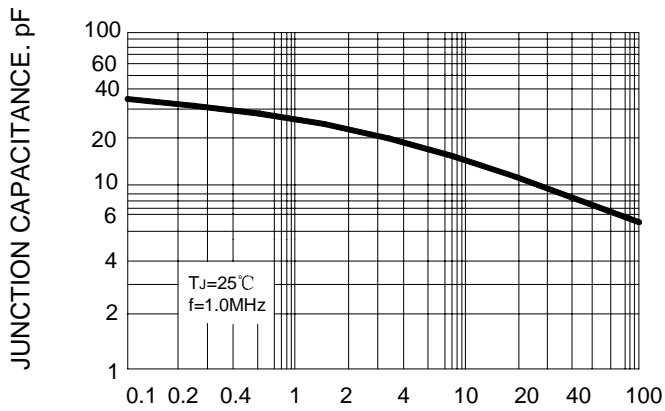


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

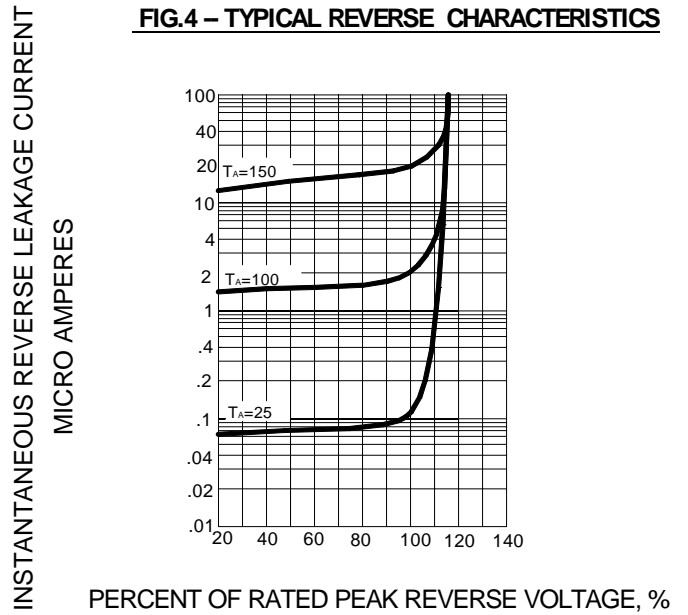


FIG.5 – PEAK FORWARD SURGE CURRENT

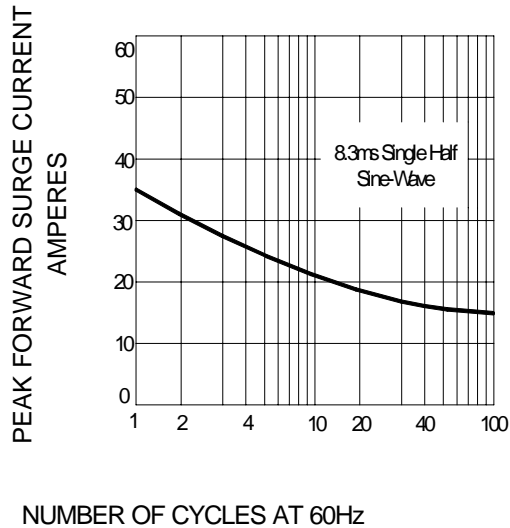
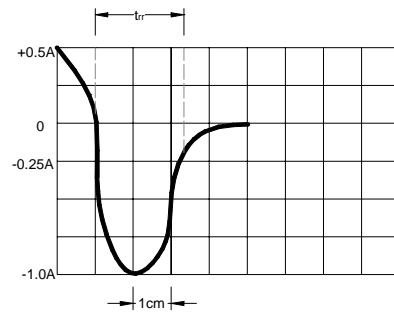
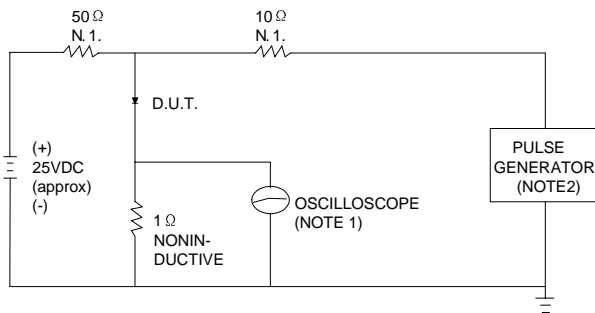


FIG.6 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES: 1. RISE TIME = 7ns MAX INPUT IMPEDANCE = 1M Ω . 22pF.
 2. RISE TIME = 10ns MAX SOURCE IMPEDANCE = 50 Ω .

SET TIME BASE FOR 10/20 ns/cm