

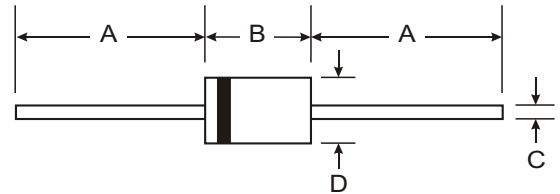
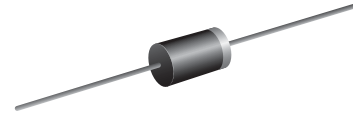
**VOLTAGE RANGE: 50 - 600 V**  
**CURRENT: 1.0 A**

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

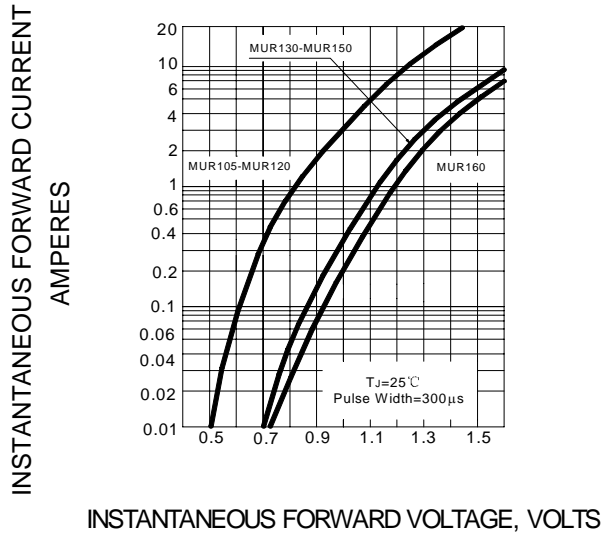
NOTE: 1. Measured with I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>rr</sub>=0.25A.

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

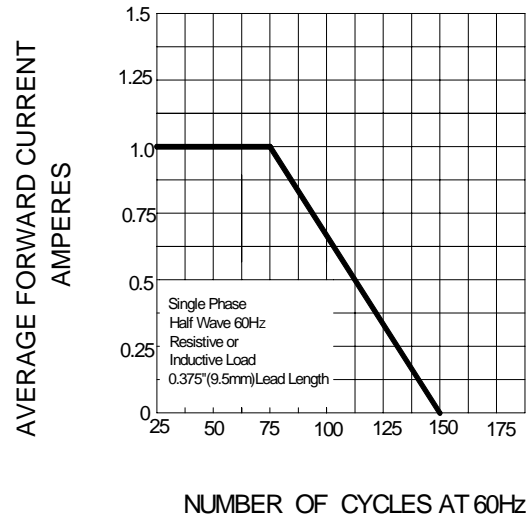
3. Thermal resistance from junction to ambient.



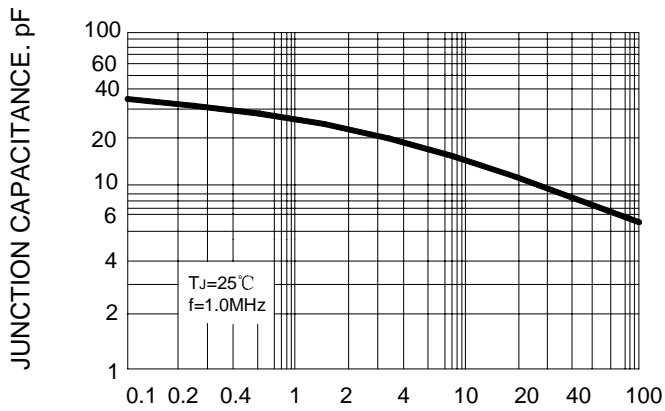
**FIG.1 – TYPICAL FORWARD CHARACTERISTICS**



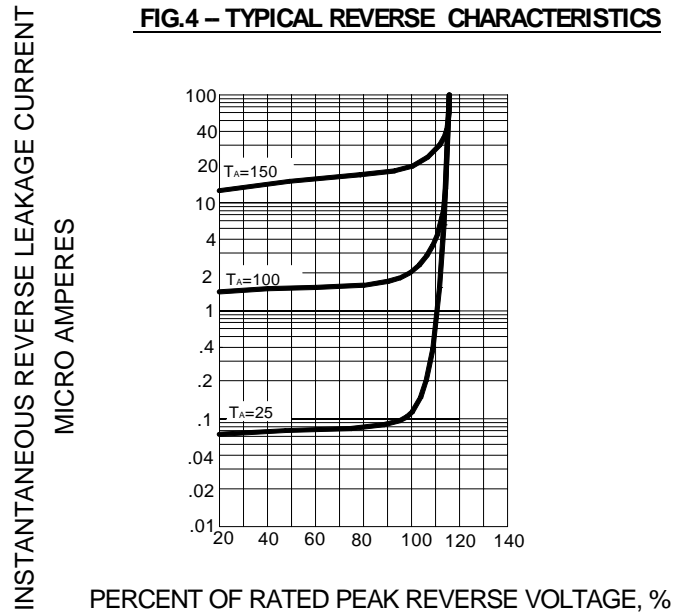
**FIG.2 – FORWARD DRATING CURVE**



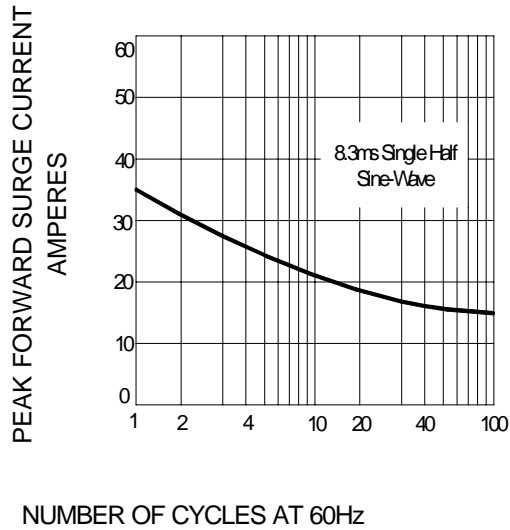
**FIG.3 – TYPICAL JUNCTION CAPACITANCE**



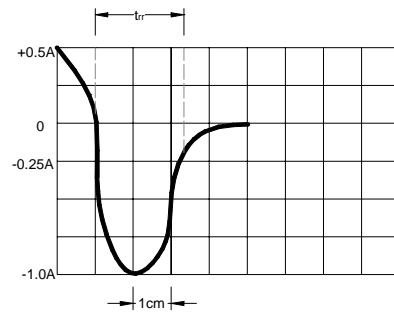
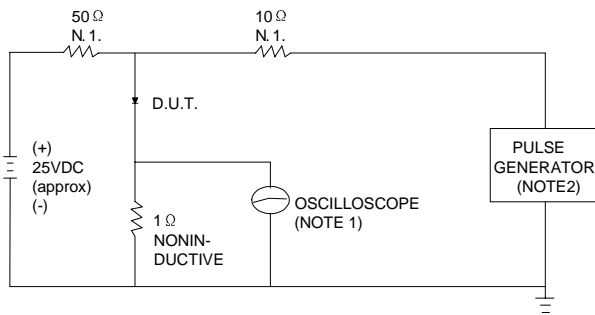
**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**



**FIG.5 – PEAK FORWARD SURGE CURRENT**



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



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

SET TIME BASE FOR 10/20 ns/cm