

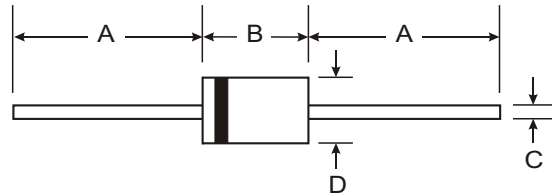
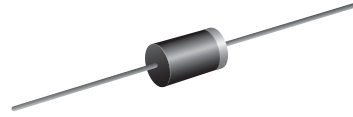
**VOLTAGE RANGE: 50 - 600 V**  
**CURRENT: 4.0 A**

### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

### Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-201AD		
Dim	Min	Max
A	25.40	—
B	8.50	9.53
C	0.96	1.06
D	4.80	5.21
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%.

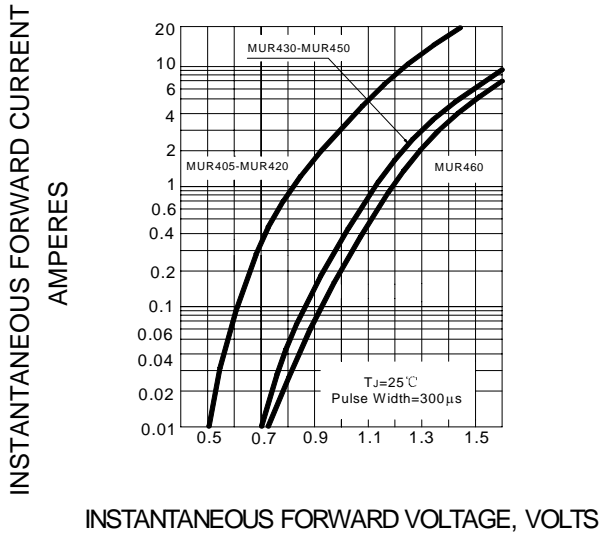
Characteristic	Symbol	MUR 405	MUR 410	MUR 415	MUR 420	MUR 430	MUR 440	MUR 450	MUR 460	UNITS	
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	50	100	150	200	300	400	500	600	V	
Maximum RMS voltage	V <sub>RMS</sub>	35	70	105	140	210	280	350	420	V	
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	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>	4.0								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					μ
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.

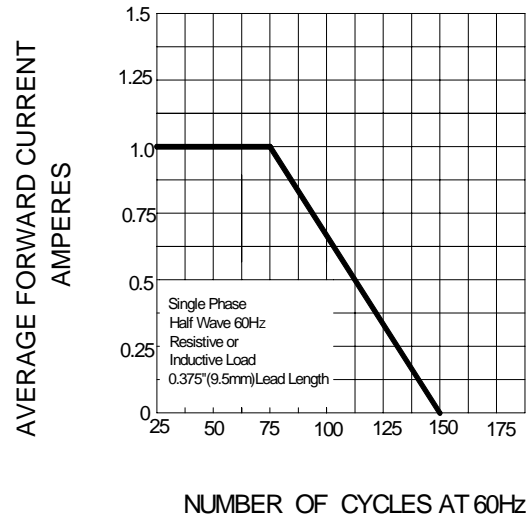
2. Measured at 1.0MHz and applied reverse voltage of 4.1V DC.

3. Thermal resistance from junction to ambient.

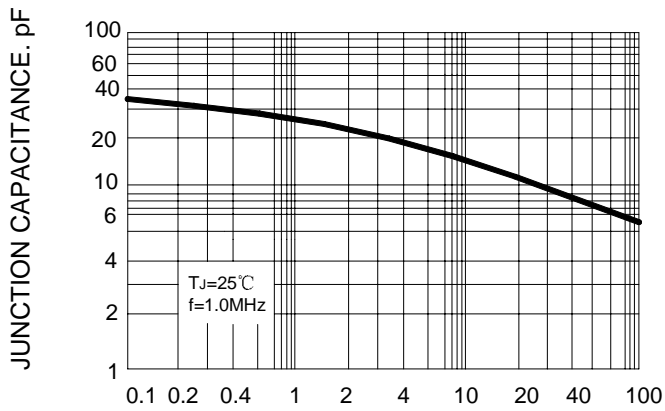
**FIG.1 – TYPICAL FORWARD CHARACTERISTICS**



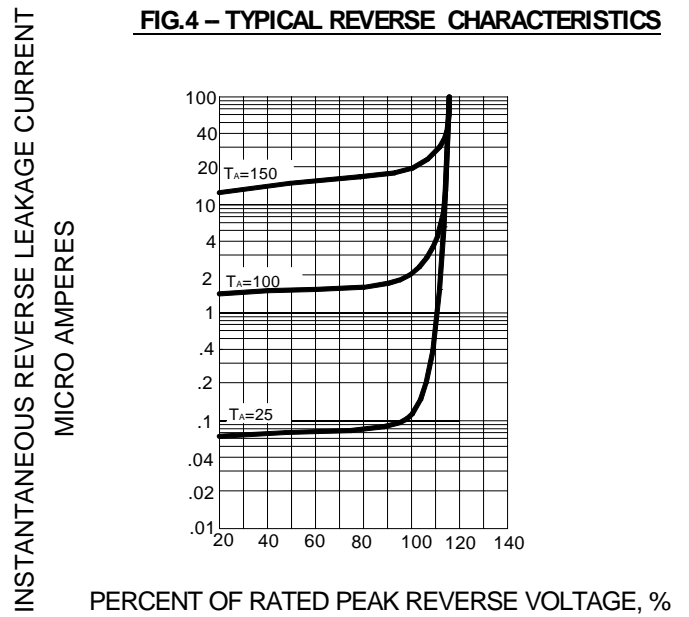
**FIG.2 – FORWARD DRATING CURVE**



**FIG.3 – TYPICAL JUNCTION CAPACITANCE**

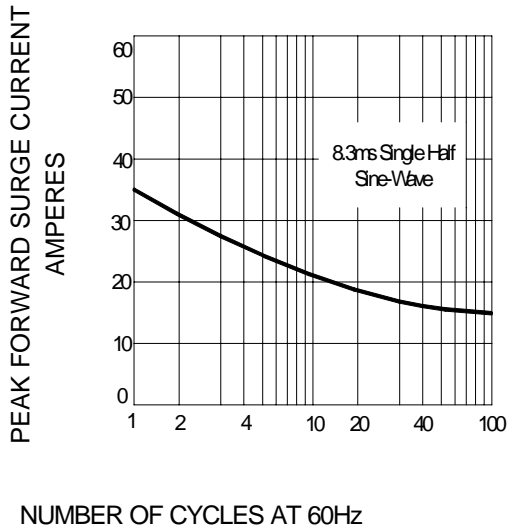


**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**

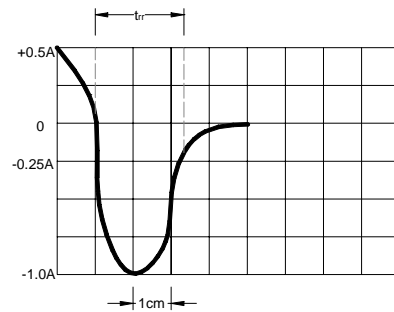
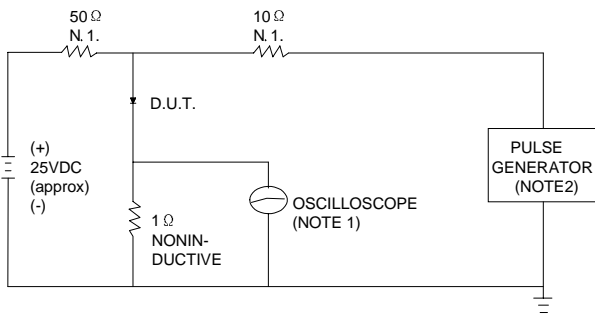




**FIG.5 – PEAK FORWARD SURGE CURRENT**



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



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

SET TIME BASE FOR 10/20 ns/cm