

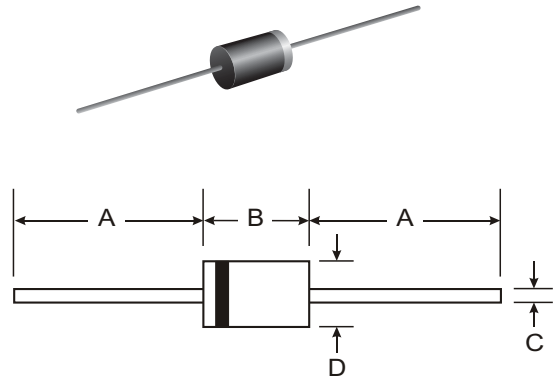
VOLTAGE RANGE: 700 - 1000 V
CURRENT: 1.0 A

Features

- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents

Mechanical Data

- Case: DO-41 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



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%.

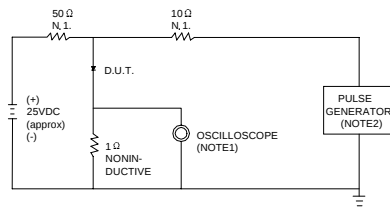
Characteristic	Symbol	MUR170	MUR180	MUR190	MUR1100	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	700	800	900	1000	V
Maximum RMS voltage	V_{RMS}	490	560	630	700	V
Maximum DC blocking voltage	V_{DC}	700	800	900	1000	V
Maximum average forward rectified current 9.5mm lead length, @T _A =75°C	$I_{F(AV)}$	1.0				A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load @T _J =125°C	I_{FSM}	30.0				A
Maximum instantaneous forward voltage @ 1.0A	V_F	1.7				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}	75				ns
Typical junction capacitance (Note2)	C_J	15				pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	60				°C/W
Operating junction temperature range	T_J	- 55 ----- + 150				°C
Storage temperature range	T_{STG}	- 55 ----- + 150				°C

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

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient.

FIG.1 – 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.

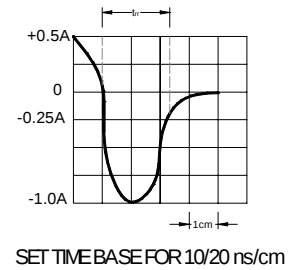


FIG.2 – TYPICAL FORWARD CHARACTERISTIC

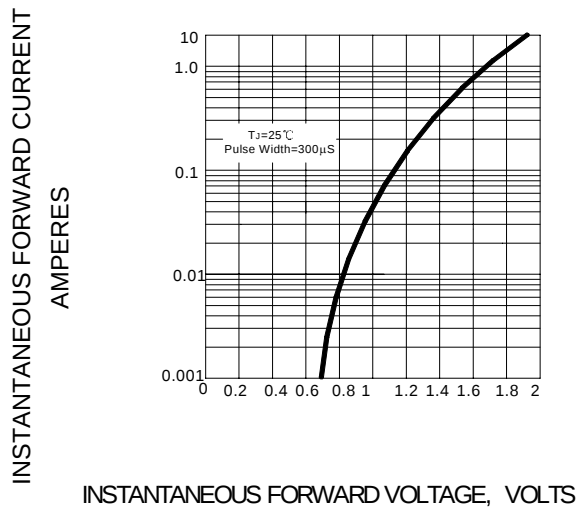


FIG.3 – FORWARD DERATING CURVE

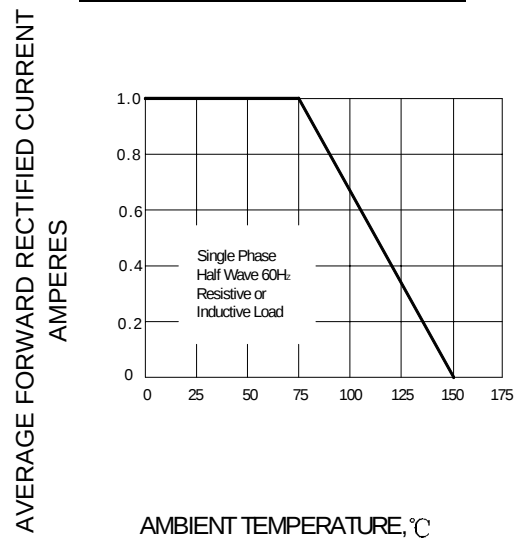


FIG.4 – PEAK FORWARD SURGE CURRENT

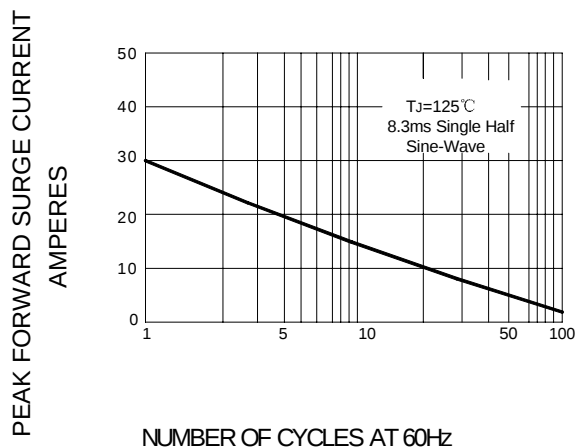


FIG.5 – TYPICAL JUNCTION CAPACITANCE

