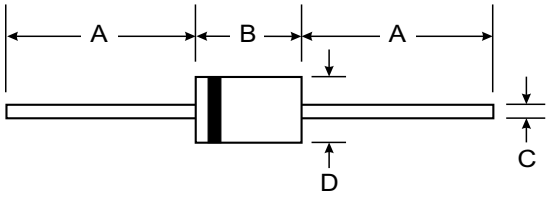
MUR170-MUR1100

1.0A Axial Leaded High Efficiency Rectifier

Features

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



Mechanical Data

- Case:JEDEC 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%.

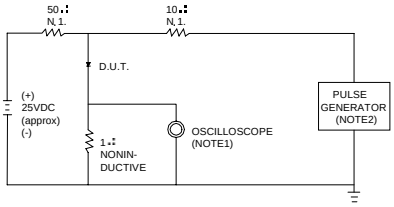
		MUR170	MUR180	MUR190	MUR1100	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	700	800	900	1000	V
Maximum RMS voltage	V_{RMS}	490	560	630	700	V
Maximum DC blocking voltage	V_{DC}	700	800	900	1000	V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	1.0				A
Peak forw ard surge current 10ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	30.0				A
Maximum instantaneous forw ard voltage @ 1.0A	V_F	1.7				V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	10.0 100.0				μA
Maximum reverse recovery time (Note1)	trr	75				ns
Typical junction capacitance (Note2)	C_J	15				pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	60				℃/W
Operating junction temperature range	T_J	- 55 ----- + 150				℃
Storage temperature range	T_{STG}	- 55 ----- + 150				℃

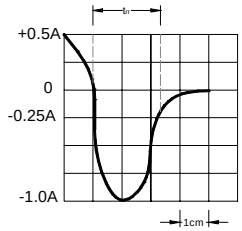
NOTE: 1.Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.

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

SET TIME BASE FOR 10/20 ns/cm

FIG.2 – TYPICAL FORWARD CHARACTERISTIC

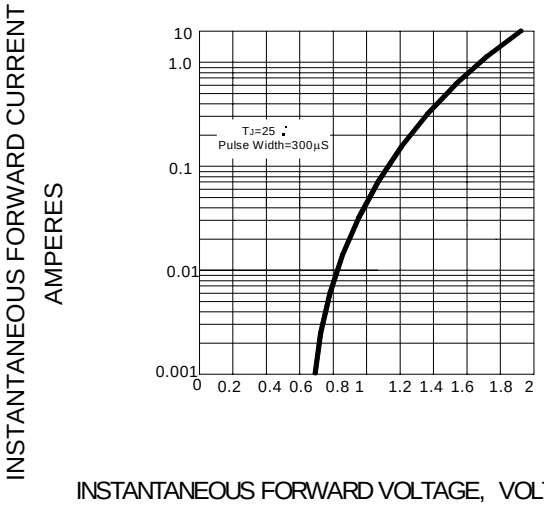


FIG.3 – FORWARD DERATING CURVE

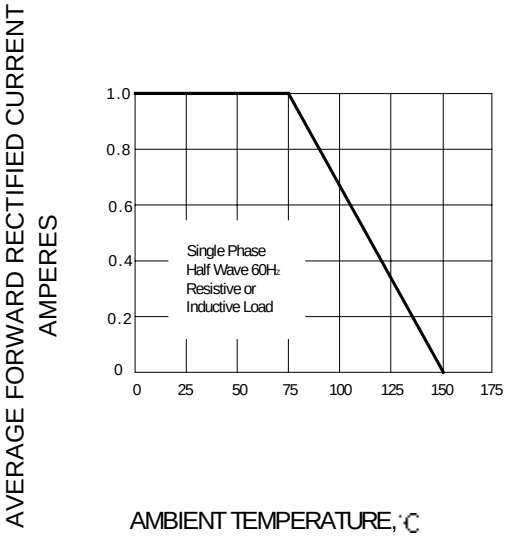


FIG.4 – PEAK FORWARD SURGE CURRENT

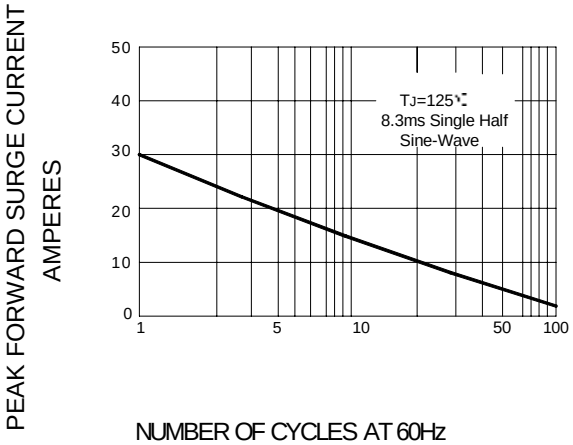


FIG.5--TYPICAL JUNCTION CAPACITANCE