Super Fast Rectifier

Features:

- Low Cost
- Low Leakage
- Low Forward Voltage Drop
- High Current Capability
- Easily Cleaned With Alcohol,Isopropanol And Similar Solvents

Mechanical Data:

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

Maximum Ratings and Electrical Characteristics:

Ratings at 25°C ambient temperature unless otherwise specified
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load,derate by 20%.

Characteristics	Symbol	MUR160-T	Units
Maximum recurrent peak reverse voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RMS}	420	V
Maximum DC blocking voltage	V_{DC}	600	V
Maximum average forward rectified current 9.5mm lead length at T_A =75	$I_{F(AV)}$	1	A
Peak forward surge current 8.3ms single half-sine-wave super imposed on rated load at T_J =125°C	I_{FSM}	35	A
Maximum instantaneous forward voltage at 1A	V_F	1.25	V
Maximum reverse current at T_A =25°C at rated DC blocking voltage at T_A =100°C	I_R	5 150	A
Maximum reverse recovery time (Note1)	t_{rr}	50	ns
Typical junction capacitance (Note2)	C_J	22	pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	50	°C/W
Operating and Storage temperature range	T_J, T_{STG}	- 55 to +150	°C

Note:
(1) Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.
(2) Measured at 1MHz and applied reverse voltage of 4.1V $_{DC}$
(3) Thermal resistance from junction to ambient

FIG.1 – TYPICAL FORWARD CHARACTERISTICS

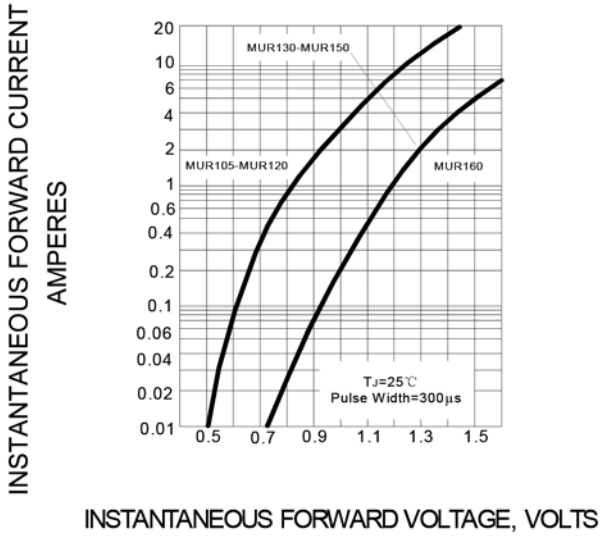


FIG.2 – FORWARD DRATING CURVE

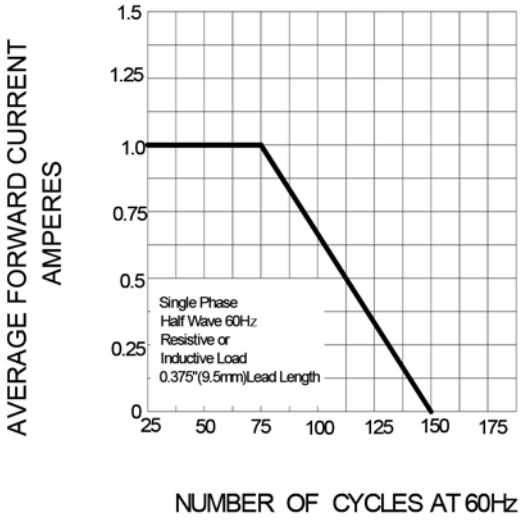


FIG.3 – TYPICAL JUNCTION CAPACITANCE

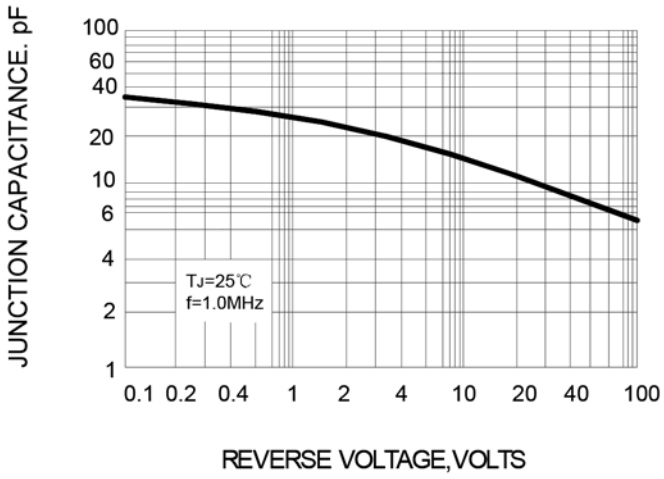


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

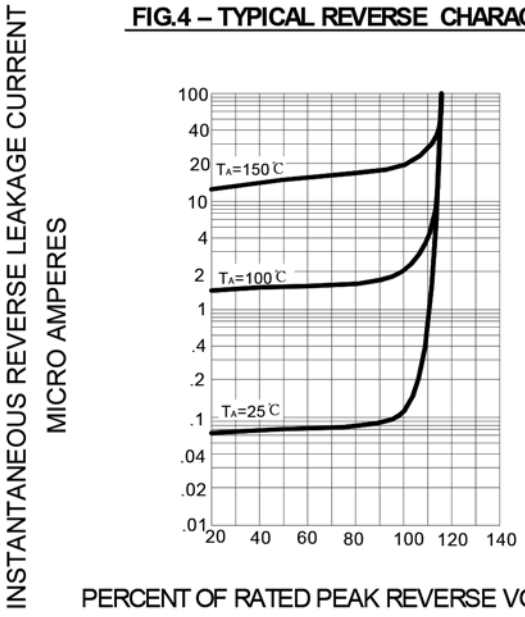


FIG.5 – PEAK FORWARD SURGE CURRENT

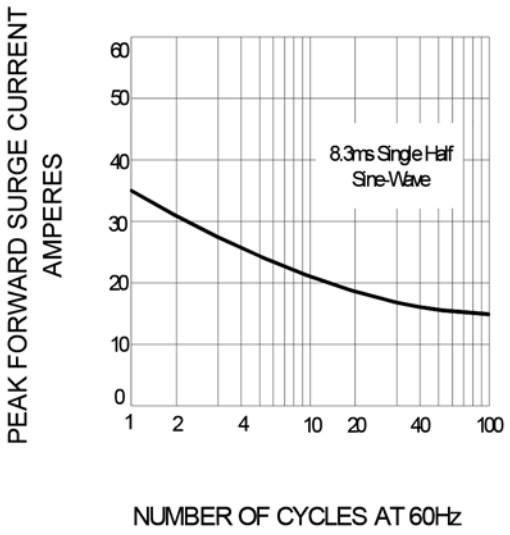
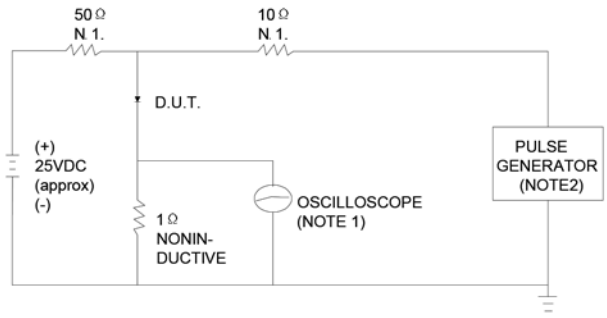
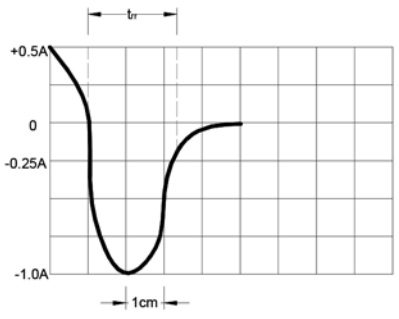


FIG.6 – TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



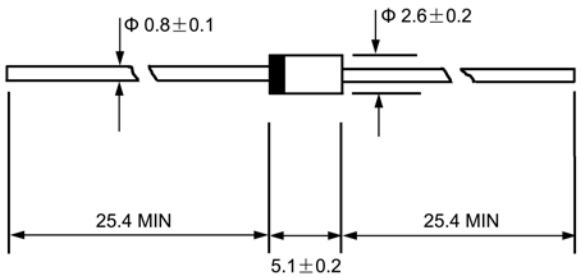
NOTES: 1. RISE TIME = 7ns MAX INPUT IMPEDANCE = 1MΩ .22pF.
2. RISE TIME =10ns MAX SOURCE IMPEDANCE=50 Ω.



SET TIME BASE FOR 10/20 ns/cm

Dimensions:

DO - 41



Dimensions : Millimetres

Part Number Table

Description	Part Number
Super Fast Rectifier	MUR160-T