



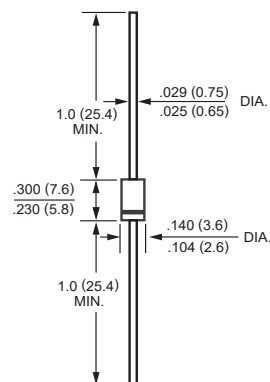
Features

- ◇ 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: JEDEC DO-41, molded plastic
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.340 grams
- ◇ Mounting position: Any

DO-15



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		MUR 105	MUR 110	MUR 115	MUR 120	MUR 130	MUR 140	MUR 150	MUR 160	UNITS
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	350	420	V
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	500	600	V
Maximum average forw ard rectified current 9.5mm lead length, @T _A =75°C	I _{F(AV)}	1.0								A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T _J =125°C	I _{FSM}	35.0								A
Maximum instantaneous forw ard voltage @ 1.0A	V _F	0.875				1.25				V
Maximum reverse current @T _A =25°C at rated DC blocking voltage @T _A =100°C	I _R	2.0 50				5.0 150				μ A
Maximum reverse recovery time (Note1)	t _{rr}	25				50				ns
Typical junction capacitance (Note2)	C _J	22								pF
Typical thermal resistance (Note3)	R _{θJA}	50								°C/W
Operating junction temperature range	T _J	- 55 ----- + 150								°C
Storage temperature range	T _{STG}	- 55 ----- + 150								°C

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

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

3. Thermal resistance from junction to ambient.

Ratings AND Characteristic Curves

FIG.1 – TYPICAL FORWARD CHARACTERISTICS

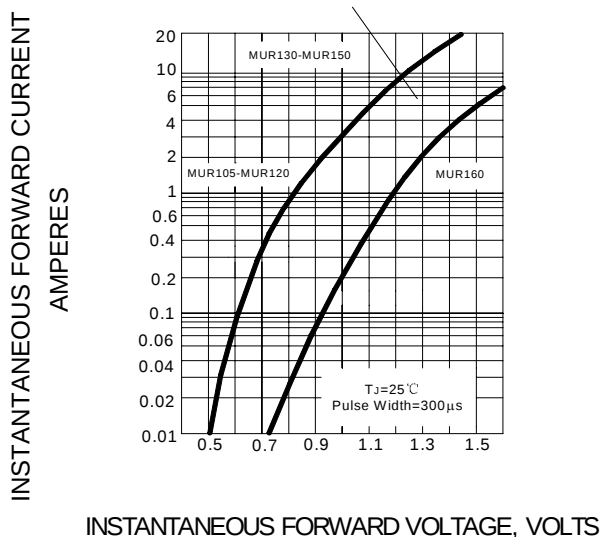


FIG.2 -- FORWARD DRATING CURVE

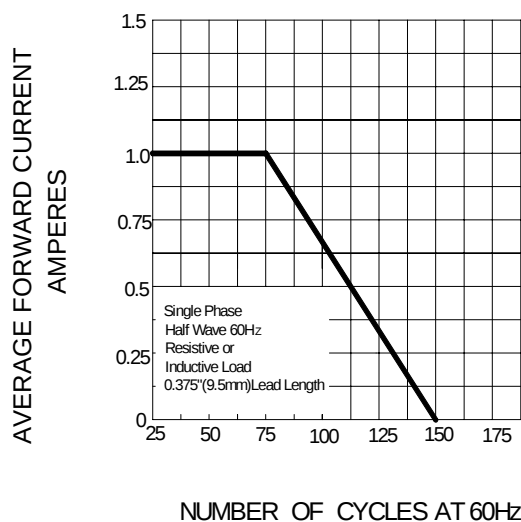
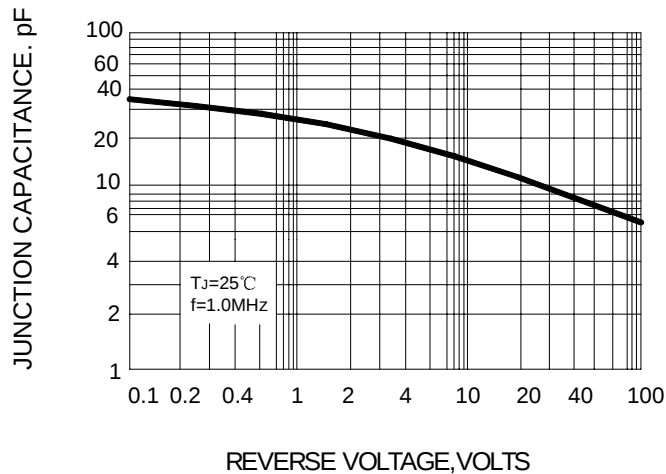
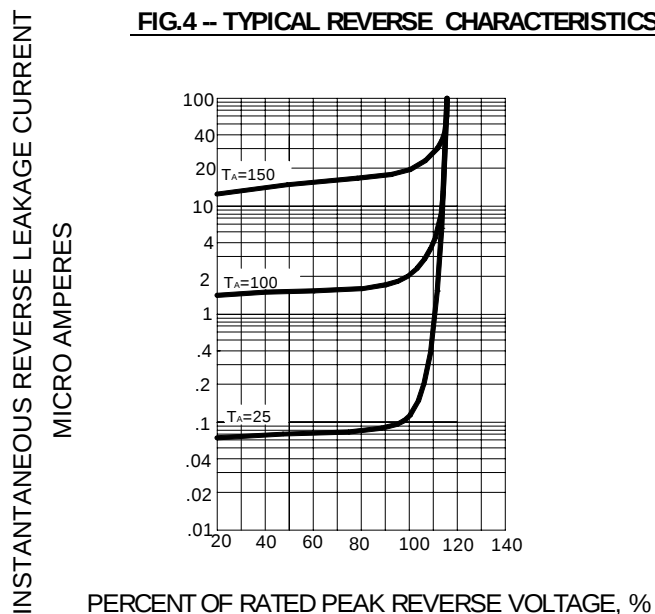
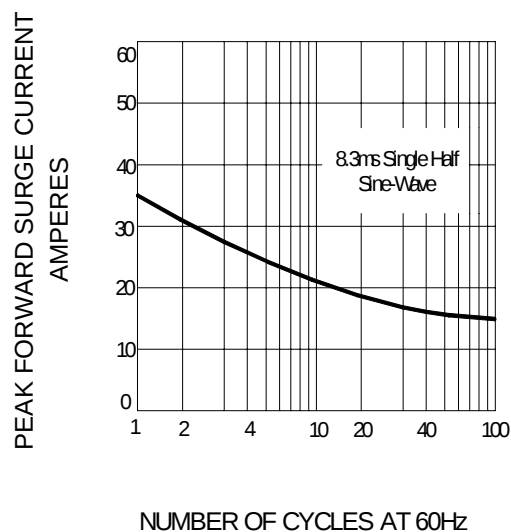
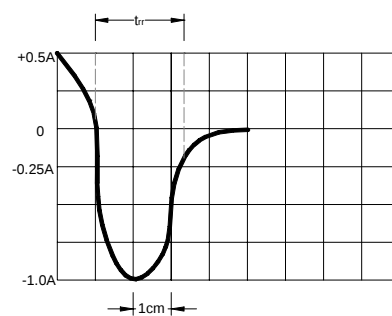
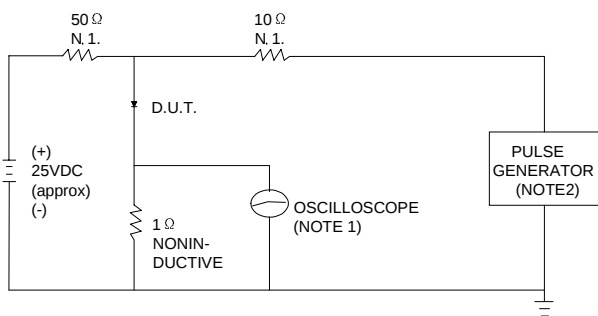


FIG.3 – TYPICAL JUNCTION CAPACITANCE



Ratings AND Characteristic Curves

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 Ω . 22pF.
2. RISE TIME = 10ns MAX. SOURCE IMPEDANCE = 50 Ω .

SET TIME BASE FOR 10/20 ns/cm

PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
DO-41	5000/AMMO	50000	42X28X31	14.00	12.00