

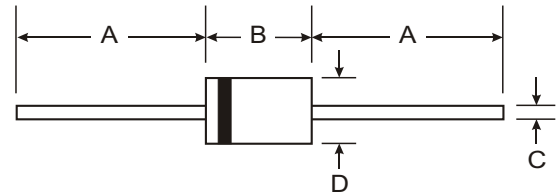
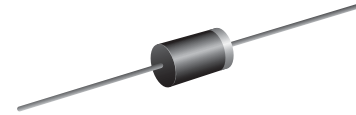
VOLTAGE RANGE: 100 - 1000V
CURRENT: 1.0 A

Features

- Low cost
- Diffused junction
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-0

Mechanical Data

- Case: D O - 4 1 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.4 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

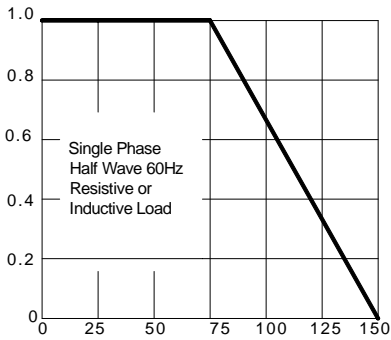
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	EM1Y	EM1Z	EM1	EM1A	EM1B	EM1C	Unit
Maximum recurrent peak reverse voltage	V _{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	100	200	400	600	800	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 8.3ms single half-sine-wave superimposed on rated load @T _J =125°C	I _{FSM}	45.0						A
Maximum instantaneous forward voltage @ 1.0 A	V _F	0.97						V
Maximum reverse current @T _A =25°C at rated DC blocking voltage @T _A =100°C	I _R	5.0 50.0						μA
Typical junction capacitance (Note1)	C _J	15						pF
Typical thermal resistance (Note2)	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 at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance from junction to ambient.

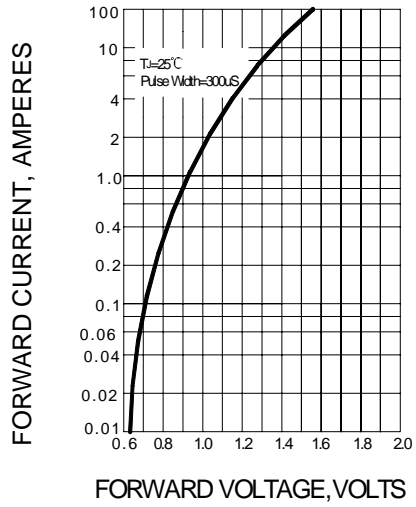
FIG.1 – FORWARD DERATING CURVE

AVERAGE FORWARD CURRENT, AMPERES



AMBIENT TEMPERATURE, °C

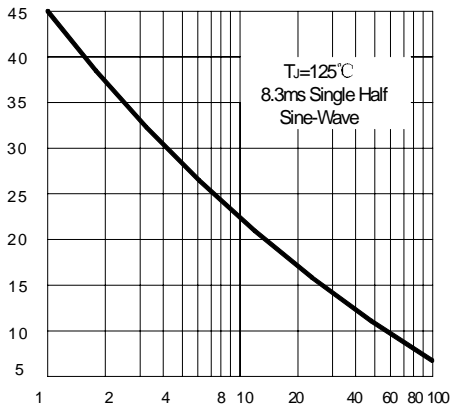
FIG.2 – TYPICAL FORWARD CHARACTERISTICS



FORWARD VOLTAGE, VOLTS

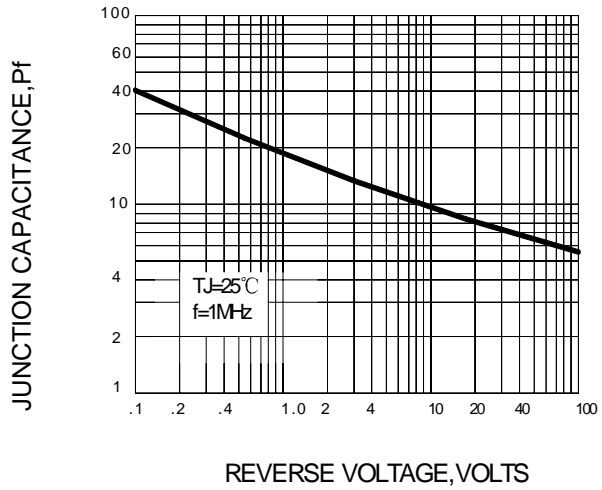
FIG.3 – PEAK FORWARD SURGE CURRENT

PEAK FORWARD SURGE CURRENT
AMPERES



NUMBER OF CYCLES AT 60Hz

FIG.5 – TYPICAL JUNCTION CAPACITANCE



REVERSE VOLTAGE, VOLTS