

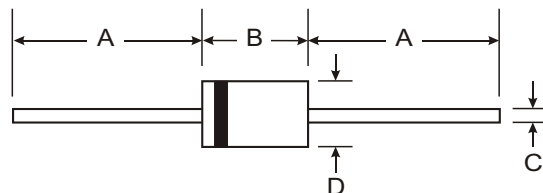
VOLTAGE RANGE: 200 - 600V
CURRENT: 1.0 A

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: 0.34 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	EM01Z	EM01	EM01A	Unit
Maximum recurrent peak reverse voltage	V _{RRM}	200	400	600	V
Maximum RMS voltage	V _{RMS}	140	280	420	V
Maximum DC blocking voltage	V _{DC}	200	400	600	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

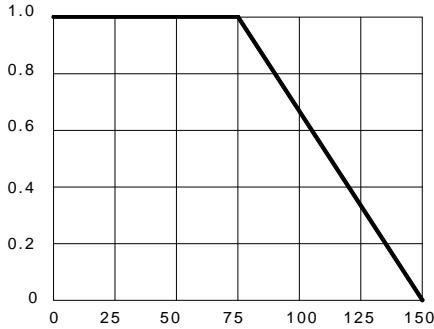
NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance from junction to ambient.



FIG.1 – FORWARD DERATING CURVE

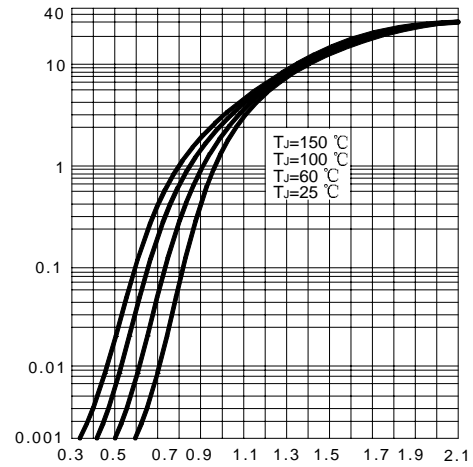
AVERAGE FORWARD CURRENT, AMPERES



AMBIENT TEMPERATURE, °C

FIG.2 – TYPICAL FORWARD CHARACTERISTICS

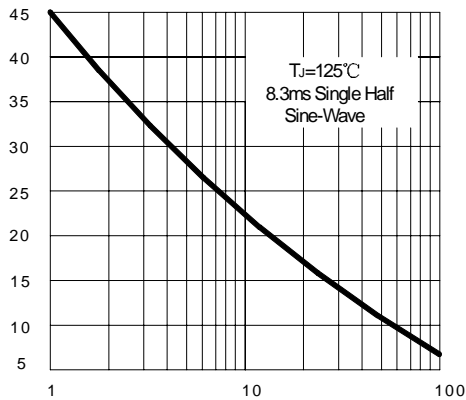
FORWARD CURRENT, AMPERES



FORWARD VOLTAGE, VOLTS

FIG.3 – FORWARD SURGE CURRENT

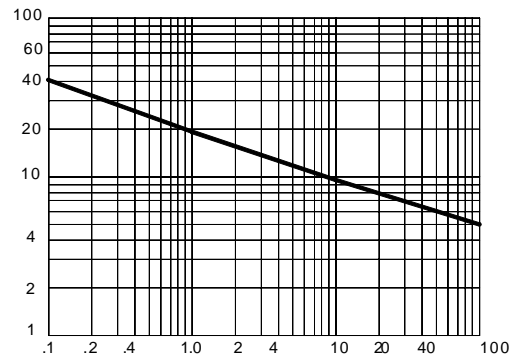
PEAK FORWARD SURGE CURRENT, AMPERES



NUMBER OF CYCLES AT 60Hz

FIG.4 – TYPICAL JUNCTION CAPACITANCE

JUNCTION CAPACITANCE, pF



REVERSE VOLTAGE, VOLTS