

VOLTAGE RANGE: 1250V

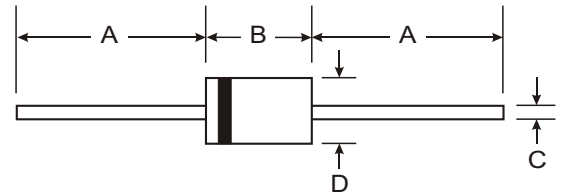
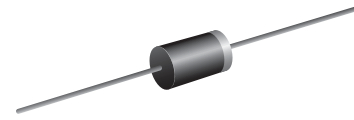
CURRENT: 1.0 A

Features

- Molded case feature for auto insertion
- High current capability
- Low leakage current
- High surge capability
- High temperature soldering guaranteed:
250 °C/10sec/0.375" (9.5mm) lead length at 5 lbs tension
- tension

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%.

Characteristic	Symbol	BY127M	Unit
Maximum recurrent peak reverse voltage	V _{RRM}	1250	V
Maximum RMS voltage	V _{RMS}	875	V
Maximum DC blocking voltage	V _{DC}	1250	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}	30.0	A
Maximum instantaneous forward voltage @ 1.0 A	V _F	1.1	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	10	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 at 0.375"(9.5mm) lead length, P.C.board mounted

FIG.1 – TYPICAL FORWARD CURRENT DERATING CURVE

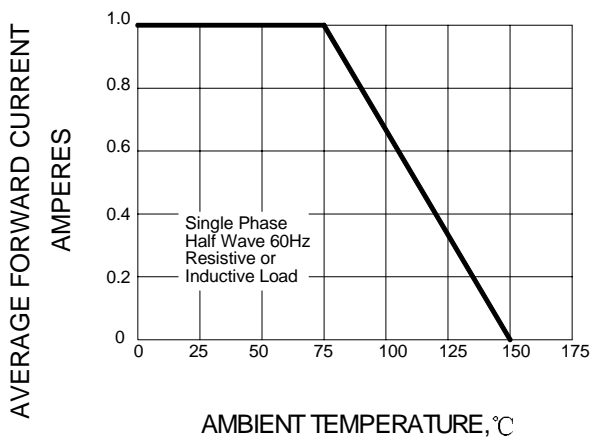


FIG.2 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

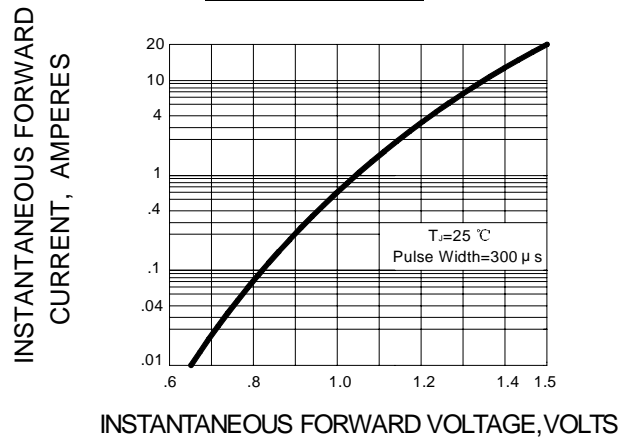


FIG.3 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

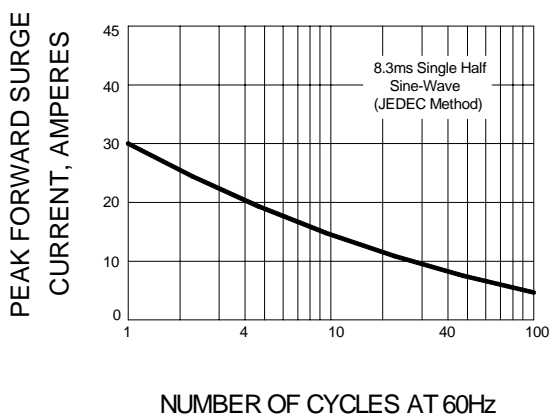


FIG.4 – TYPICAL REVERSE CHARACTERISTICS

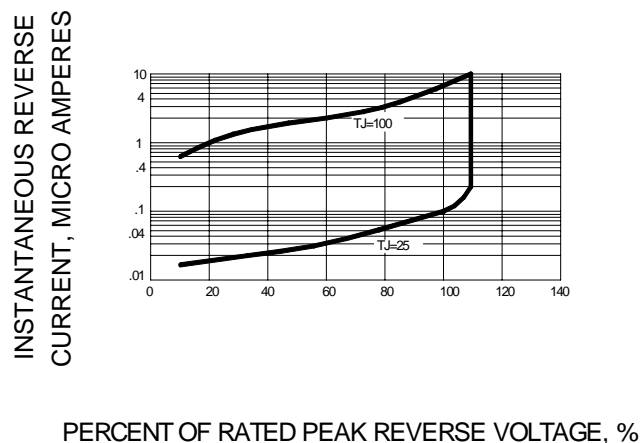


FIG.5 – TYPICAL JUNCTION CAPACITANCE

