BY127M, BY133, EM513

<u>Io</u>

1.0 AMP SILICON RECTIFIERS

FEATURES

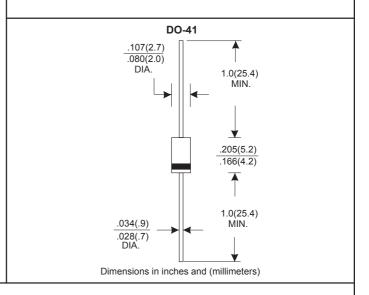
- * Low forward voltage drop
- * High current capability
- * High reliability
- * High surge current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.34 grams

VOLTAGE RANGE 1250 to 1600 Volts CURRENT

1.0 Ampere



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	BY127M	BY133	EM513	UNITS
Maximum Recurrent Peak Reverse Voltage	1250	1300	1600	V
Maximum RMS Voltage	875	910	1120	V
Maximum DC Blocking Voltage	1250	1300	1600	V
Maximum Average Forward Rectified Current				
.375"(9.5mm) Lead Length at Ta=75°C		1.0		
Peak Forward Surge Current, 8.3 ms single half sine-wave				
superimposed on rated load (JEDEC method)		30		
Maximum Instantaneous Forward Voltage at 1.0A		1.1		
Maximum DC Reverse Current Ta=25°C		5.0		
at Rated DC Blocking Voltage Ta=100℃		50		
Typical Junction Capacitance (Note 1)		15		
Typical Thermal Resistance RθJA (Note 2)		50		
Operating and Storage Temperature Range Тл, Тэтс		-65 — +150		

NOTES:

- 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- 2. Thermal Resistance from Junction to Ambient .375" (9.5mm) lead length.

RATING AND CHARACTERISTIC CURVES (BY127M, BY133, EM513)

FIG.1-TYPICAL FORWARD
CHARACTERISTICS

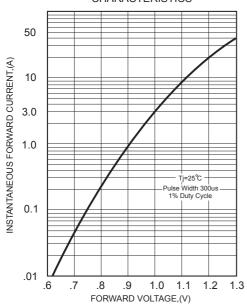


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

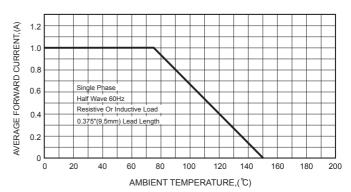


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

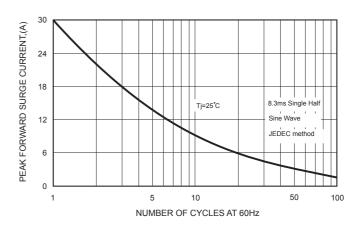


FIG.3 - TYPICAL REVERSE

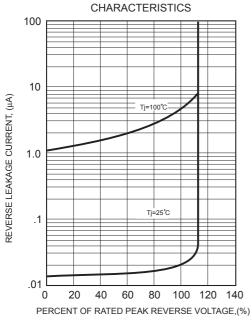


FIG.5-TYPICAL JUNCTION CAPACITANCE

