

GENERAL PURPOSE PLASTIC RECTIFIER

Reverse Voltage - 1250 to 1800 Volts

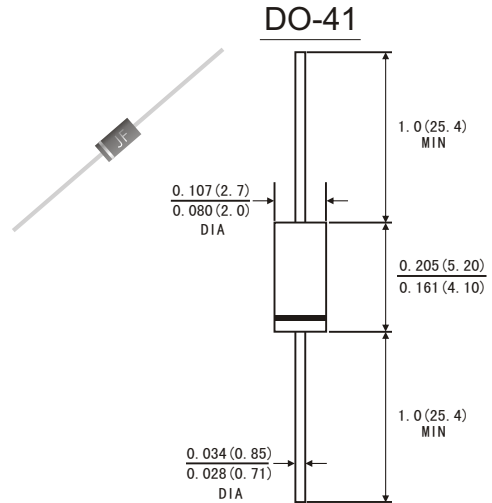
Forward Current -1.0Ampere

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
 - Construction utilizes void-free molded plastic technique
 - Low reverse leakage
 - Low forward voltage drop
 - High forward surge current capability
 - High current capability
 - High reliability
 - High temperature soldering guaranteed:260°C / 10 seconds at terminals
- Component in accordance to RoHs 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- *Case:* JEDEC DO-41 molded plastic body
- *Terminals:* Lead solderable per MIL-STD-750,method 2026
- *Polarity:* Color band denotes cathode end
- *Mounting Position:* Any
- *Weight:* 0.012ounce, 0.33 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave 60Hz,,resistive or inductive load. For capacitive load, derate by 20%.)

		Symbols	BY127	BY133	EM513	EM516	Units
Maximum Recurrent Peak Reverse Voltage		VRRM	1250	1300	1600	1800	Volts
Maximum RMS Voltage		VRMS	875	910	1100	1260	Volts
Maximum DC Blocking Voltage		VDC	1250	1300	1600	1800	Volts
Maximum average Forward Rectified Current 0.375"(9.5mm) lead length at TA=75°C		IAV)	1.0				Amp
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method)		IFSM	30.0				Amps
Maximum Instantaneous Forward Voltage @ 1.0 A		VF	1.1				Volts
Maximum Reverse current at rated DC Blocking Voltage	TA =25°C	IR	5.0				μA
	TA =100°C		200.0				
Maximum Full Load Reverse Current, Full Cycle Average .375" (9.5mm) Lead Length @TA=75°C				30.0			
Typical Thermal resistance (Note 2)		RθJA	50.0				°C/W
Typical Junction Capacitance(Note 1)		CJ	15.0				pF
Operating and Storage temperature Range		TJ TSTG	-65 to+175				°C

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

RATINGS AND CHARACTERISTIC CURVES BY127 THRU EM516

FIG.1-FORWARD CURRENT DERATING CURVE

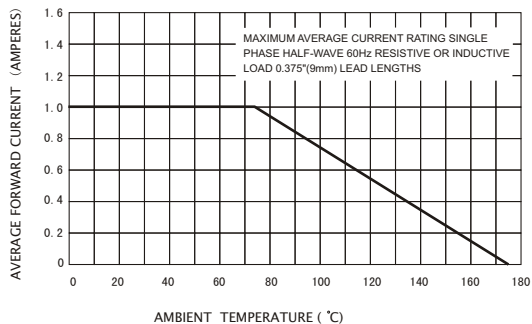


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

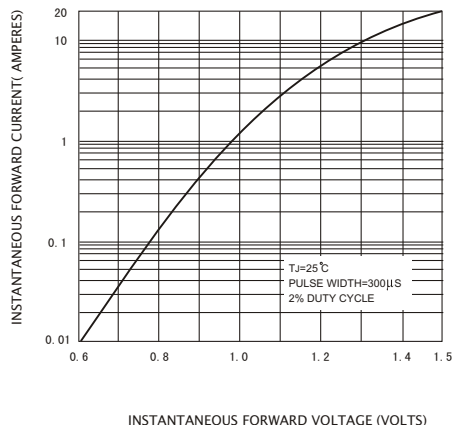


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

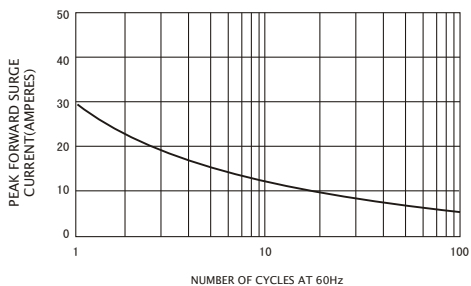


FIG.4-TYPICAL REVERSE CHARACTERISTICS

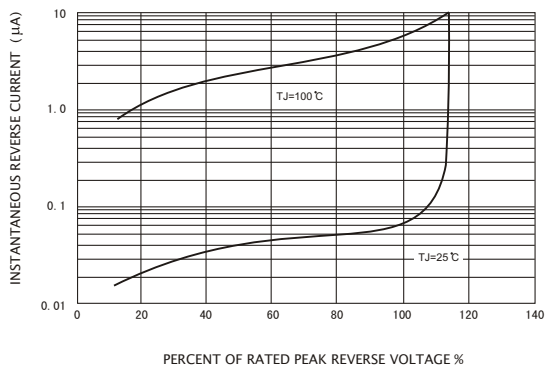


FIG.5-TYPICAL JUNCTION CAPACITANCE

