

BY127,BY133,EM513,EM516

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

MECHANICAL DATA

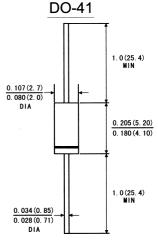
. Case: JEDEC DO-41 molded plastic body

. Terminals: lead solderable per MIL-STD-750, method 2026

. Polarity: Color band denotes cathode end

. Mounting Position: Any

. Weight: 0.012 ounce, 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 repetitive peak reverse voltage		Vrrm	1250	1300	1600	1800	Volts
Maximum RMS voltage		VRMS	875	930	1120	1270	Volts
Maximum DC blocking voltage		VDC	1250	1300	1600	1800	Volts
Macimum average forward rectified current 0.375"(9.5mm)lead length at Ta=75°C		I(AV)	1.0				Amp
Peak forward surge current 8.3ms sing-wave superimposed on rated load (JEDEC method)T _A =75℃		lғsм	30.0				Amps
Maximum instantaneous forward voltage at 1.0 A		VF	1.1			Volts	
Maximum reverse	TA=25°C	l _R	5.0			μа	
current at rated DC blocking voltage	TA=100°C	IK	200.0				
Typeical thermal resistance(Note 2)		$R\theta$ JA		50.0 25.0			°C/W
		RθJL					
Typical junction Capacitance(Note 1)		Сл		15	5.0		pF
Operating and storage temperature range		Тл Тsтg		-50 to	$^{\circ}$		

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

2.Thermal resistance from juntion to ambient and from junction lead at 0.375"(9.5mm)lead length, P.C.B. Mounted



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RATINGS AND CHARACTERISTIC CURVES BY127,BY133,EM513,EM516

FLG.1-FORWARD CURRENT DERATING CURVE

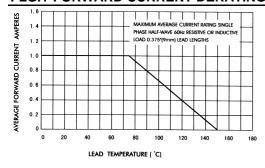
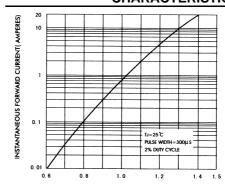


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE (VOLTS)

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

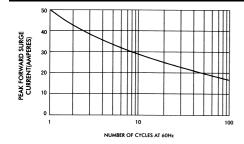
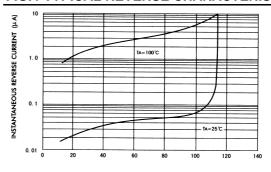


FIG.4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE%

FIG.5-TYPICAL JUNCTION CAPACITANCE

