

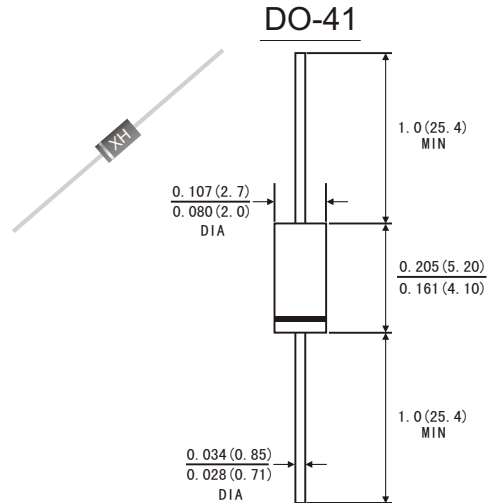


FEATURES

- 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	EM520	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1250	1300	1600	1800	2000	Volts
Maximum RMS Voltage	V_{RMS}	875	910	1100	1260	1400	Volts
Maximum DC Blocking Voltage	V_{DC}	1250	1300	1600	1800	2000	Volts
Maximum average Forward Rectified Current 0.375"(9.5mm) lead length at $T_A=75^\circ C$	$I_{(AV)}$	1.0					Amp
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30.0					Amps
Maximum Instantaneous Forward Voltage @ 1.0 A	V_F	1.1					Volts
Maximum Reverse current at rated DC Blocking Voltage	$T_c = 25^\circ C$ $T_c = 100^\circ C$	5.0					μA
		200.0					
Maximum Full Load Reverse Current, Full Cycle Average .375" (9.5mm) Lead Length @ $T_A=75^\circ C$	I_R	30.0					μA
Typical Thermal resistance (Note 2)	$R_{\theta JA}$	50.0					$^\circ C/W$
Typical Junction Capacitance(Note 1)	C_J	15.0					pF
Operating and Storage temperature Range	T_J T_{STG}	-65 to+175					$^\circ C$

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



FIG.1-FORWARD CURRENT DERATING CURVE

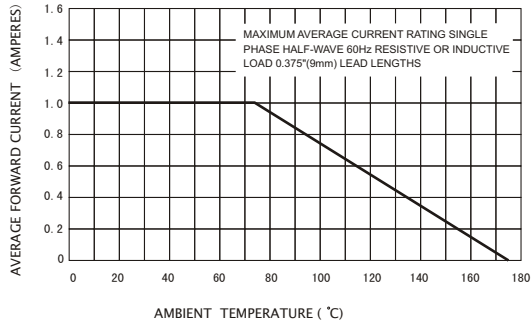


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

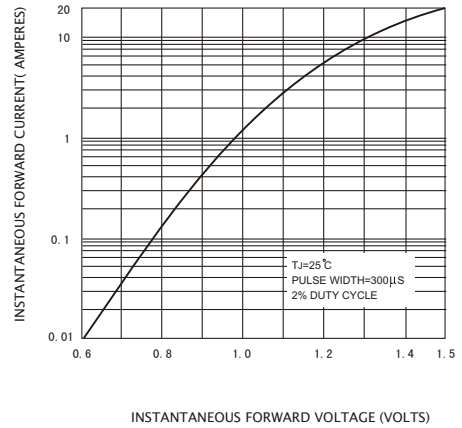


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

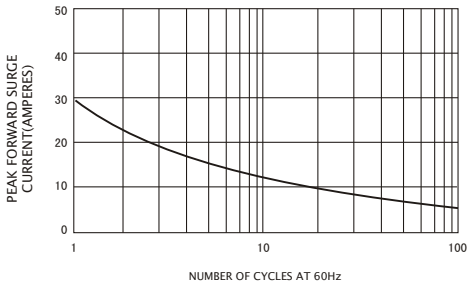


FIG.4-TYPICAL REVERSE CHARACTERISTICS

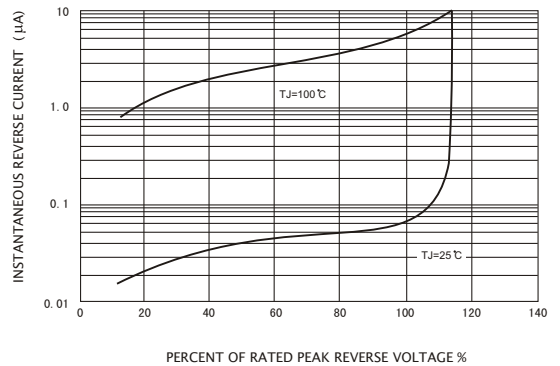


FIG.5-TYPICAL JUNCTION CAPACITANCE

