BY127,BY133,EM513,EM520

新芯微电子
NewChip
Microelectroeletronics

GENERAL PURPOSE PLASTIC RECTIFIER

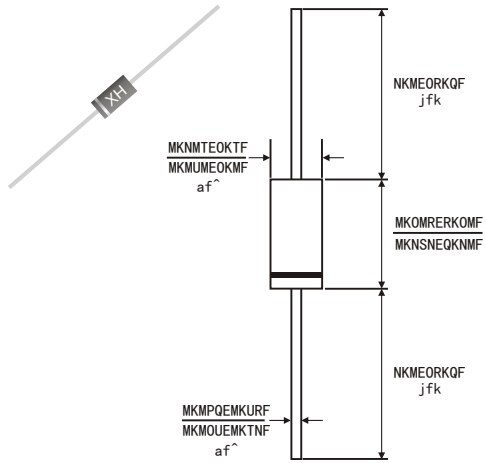
Reverse Voltage - 1250 to 1800 Volts
Forward Current -1.0Ampere

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℃ / 10 seconds at terminals

Component in accordance to RoHs 2002/95/EC and WEEE 2002/96/EC

DO-41



Dimensions in inches and (millimeters)

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

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°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_A =25℃	I_R	5.0					μA
Maximum Reverse current at rated DC Blocking Voltage T_A =100℃		200.0					μA
Maximum Full Load Reverse Current, Full Cycle Average .375″(9.5mm) Lead Length @T_A=75°C		30.0					μA
Typical Thermal resistance (Note 2)	$R_{\theta JA}$	50.0					°C/W
Typical Junction Capacitance(Note 1)	C_J	15.0					pF
Operating and Storage temperature Range	T_J T_{STG}	-65 to+175					°C

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

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FIG.1-FORWARD CURRENT DERATING CURVE

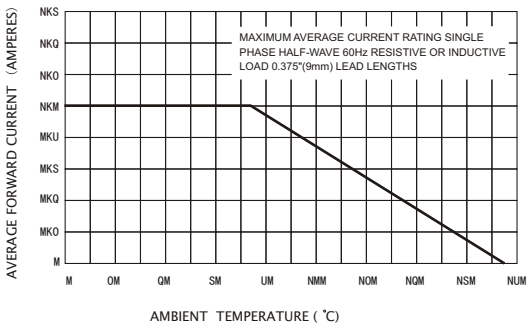

FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

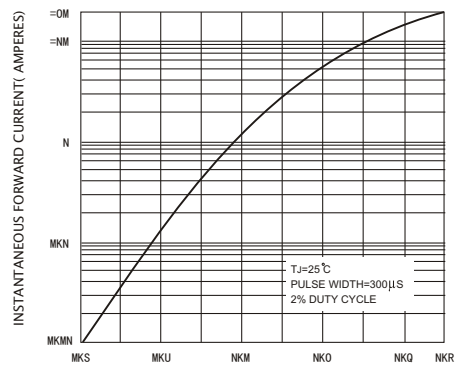

FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

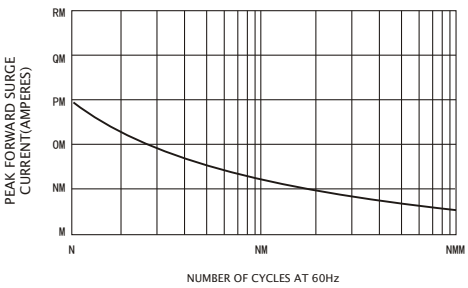

FIG.4-TYPICAL REVERSE CHARACTERISTICS

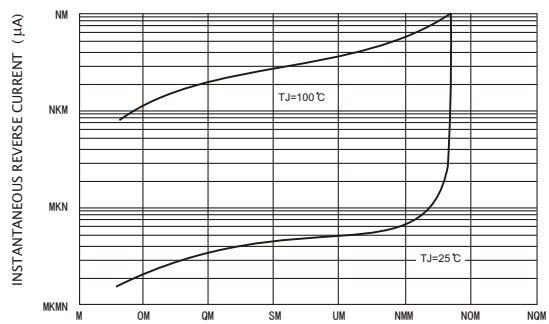

FIG.5-TYPICAL JUNCTION CAPACITANCE