

SMAJ Plastic-Encapsulate Diodes

General Purpose Rectifier

Features

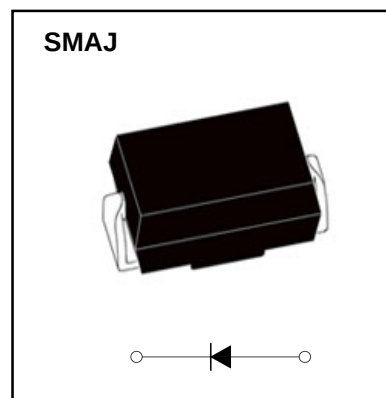
- I_o 1A
- V_{RRM} 1600V-2000V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- HDXX
- XX: From 16 To 20



Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	HD16	HD18	HD20
Repetitive Peak Reverse Voltage	V_{RRM}	V		1600	1800	2000
Maximum RMS Voltage	V_{RMS}	V		1120	1260	1400
Average Forward Current	$I_{F(AV)}$	A	60HZ Half-sine wave, Resistance load, $T_a=50^{\circ}\text{C}$	1		
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60HZ Half-sine wave, 1 cycle, $T_a=25^{\circ}\text{C}$	30		
Junction Temperature	T_j	$^{\circ}\text{C}$		-55~+125		
Storage Temperature	T_{stg}	$^{\circ}\text{C}$		-55 ~ +150		

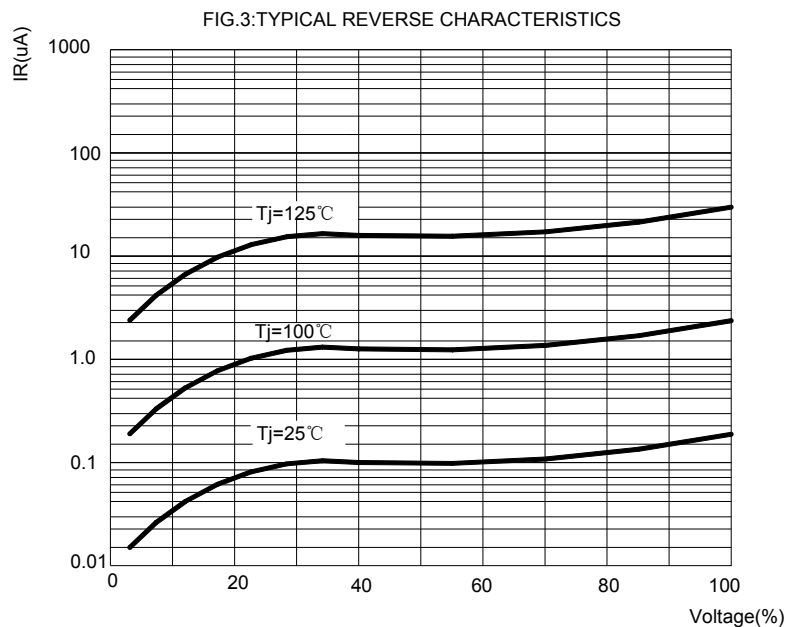
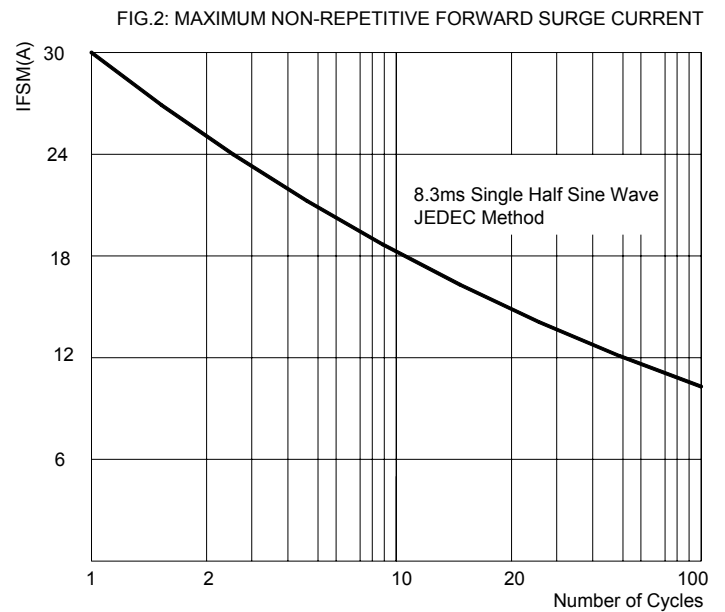
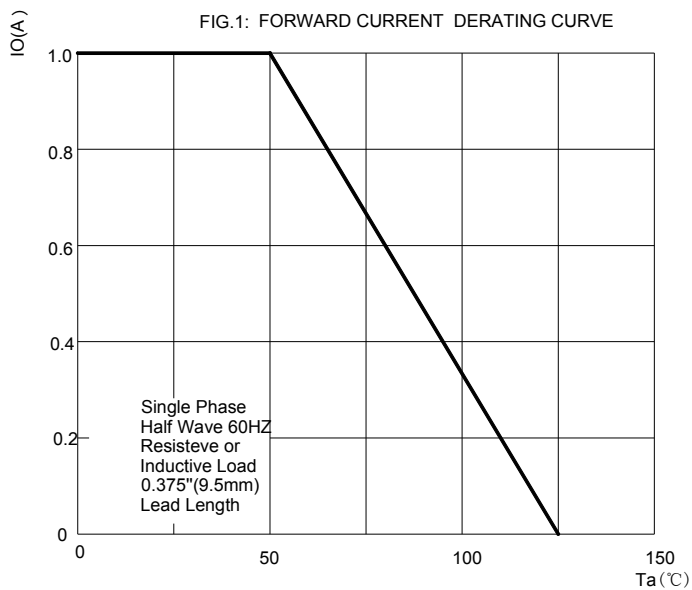
Electrical Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		Max
Peak Forward Voltage	V_{FM}	V	$I_{FM}=2.0\text{A}$		2.0
Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}\text{C}$	5
	I_{RRM2}			$T_a=125^{\circ}\text{C}$	50
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^{\circ}\text{C/W}$	Between junction and ambient		55
	$R_{\theta J-L}$		Between junction and lead		25

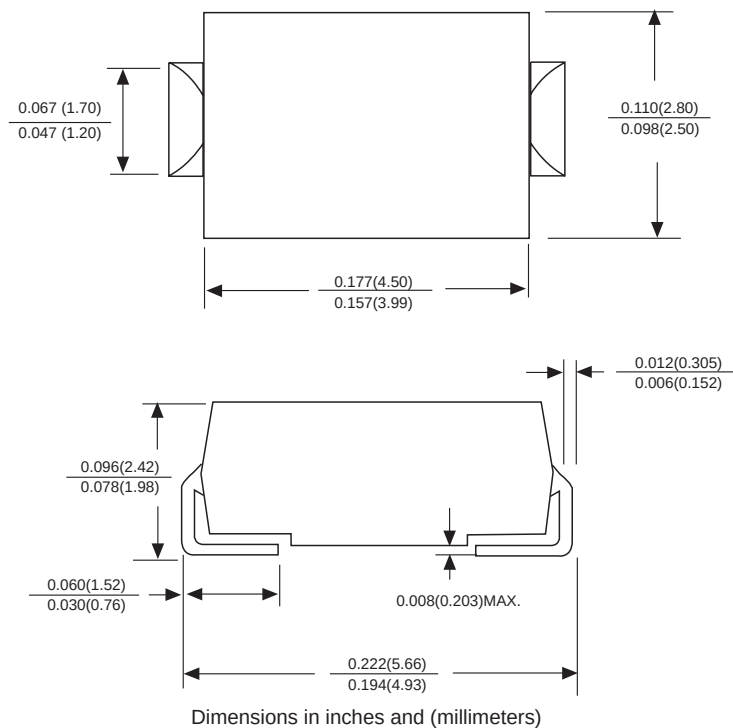
Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

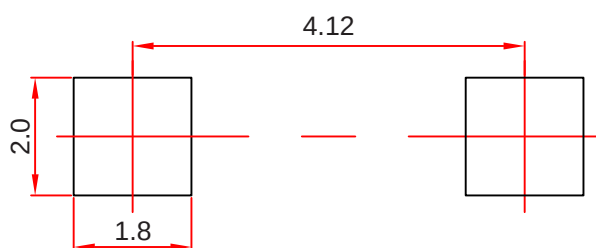
Typical Characteristics



SMAJ Package Outline Dimensions



SMAJ Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

NOTICE

JSHD reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSHD does not assume any liability arising out of the application or use of any product described herein.

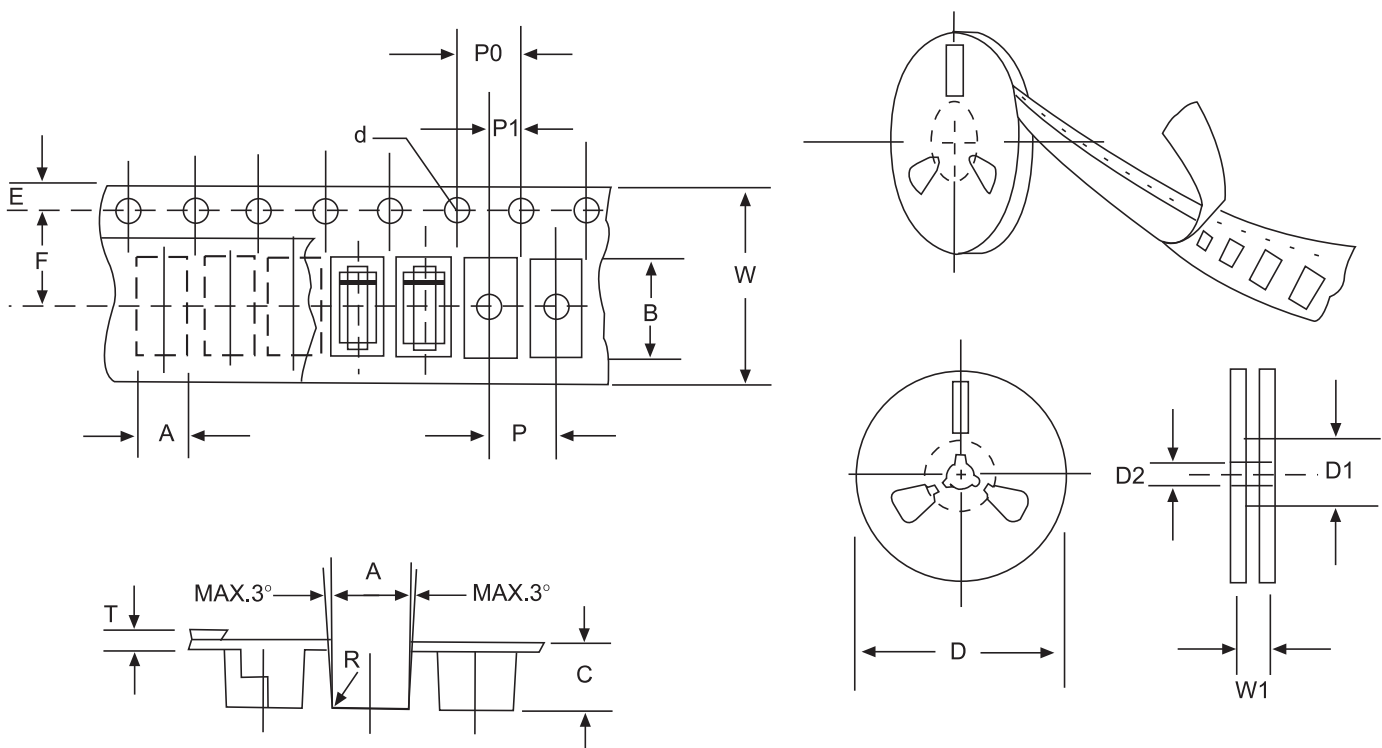


FIG:CONFIGURATION OF AXIAL TAPING

ITEM	SYMBOL	SMA mm(inch)
Carrier width	A	2.79±0.1(0.110±0.004)
Carrier length	B	5.33±0.1(0.210±0.004)
Carrier depth	C	2.36±0.1(0.093±0.004)
Sprocket hole	d	1.5±0.05(0.059±0.0002)
Reel outside diameter	D	330/178±2.0(13/7.0±0.79)
Reel inner diameter	D1	8.0±0.2(0.315±0.008)
Feed hole diameter	D2	13±0.5(0.512±0.020)
Strocket hole position	E	1.75±0.1(0.069±0.004)
Punch hole position	F	5.5±0.05(0.217±0.002)
Punch hole pitch	P	4.0±0.1(0.157±0.004)
Sprocket hole pitch	P0	4.0±0.1(0.157±0.004)
Embossment center	P1	2.0±0.1(0.079±0.004)
Totall tape thickness	T	0.28±0.02(0.011 ±0.0008)
Tape width	W	12.0±0.2(0.472±0.008)
Reel width	W1	16.8±2.0(0.661±0.079)

NOTE:Devices are packde in accordance with EIA standard RS-481-A and specification given above.