



SMAG Plastic-Encapsulate Diodes

HD20G

General Purpose Rectifier Diodes

Features

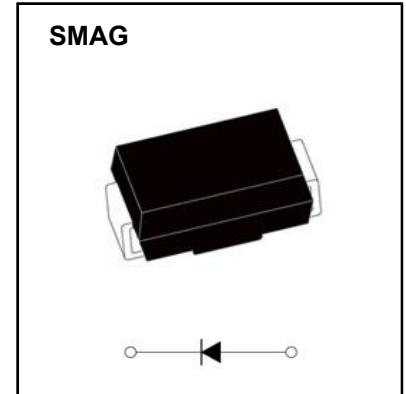
- I_o 1A
- VRRM 2000V
- Low forward voltage drop
- High surge current capability
- Glass passivated chip junction

Applications

- Rectifier

Marking

- HD20G



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	HD20G
Repetitive Peak Reverse Voltage	V_{RRM}	V		2000
Maximum RMS Voltage	V_{RMS}	V		1400
Maximum DC Blocking Voltage	V_{DC}	V		2000
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load	1
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave,1 cycle, $T_a=25^{\circ}C$	30
Junction Temperature	T_J	$^{\circ}C$		-55 ~ +150
Storage Temperature	T_{STG}	$^{\circ}C$		-55 ~ +150

Electrical Characteristics (T=25°C Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max	
Peak Forward Voltage	V_F	V	$I_{FM}=1.0A$	1.2	
Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$	5.0
	I_{RRM2}			$T_a=125^{\circ}C$	50
Juction Capacitance (Typical)	C_j	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	5.0	
Thermal Resistance (Typical)	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient	75	
	$R_{\theta J-L}$		Between junction and terminal	27	

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on FR4 PCB double sided copper mini pad

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

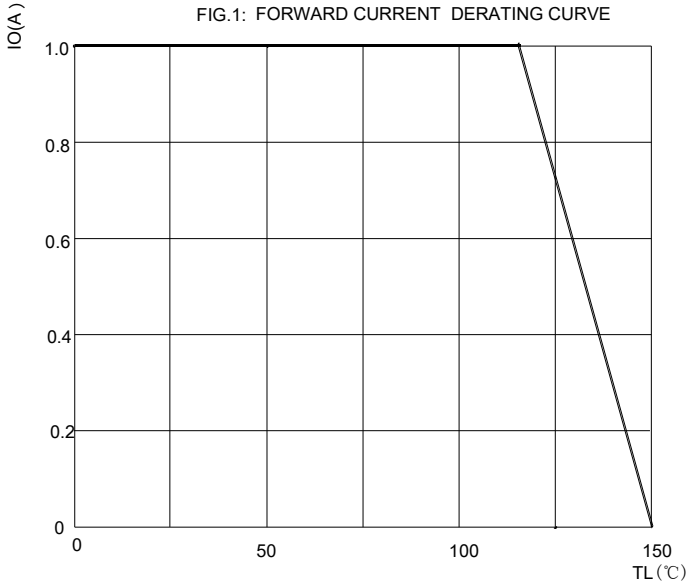


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

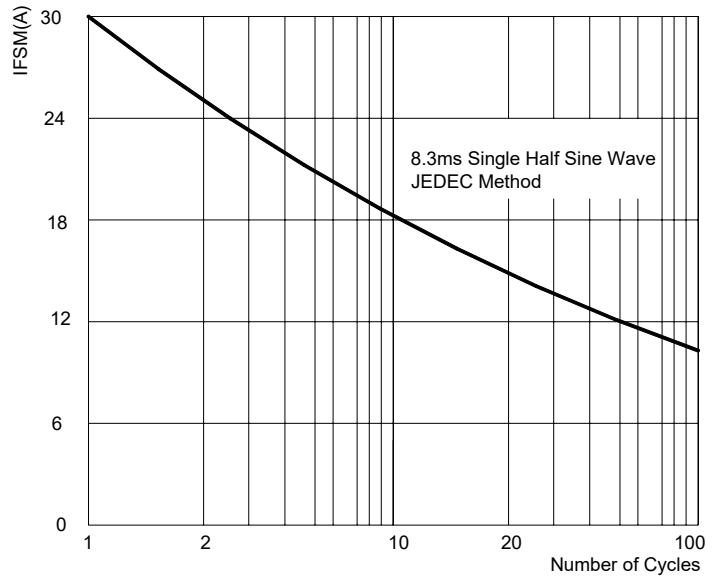


FIG.3: TYPICAL FORWARD CHARACTERISTICS

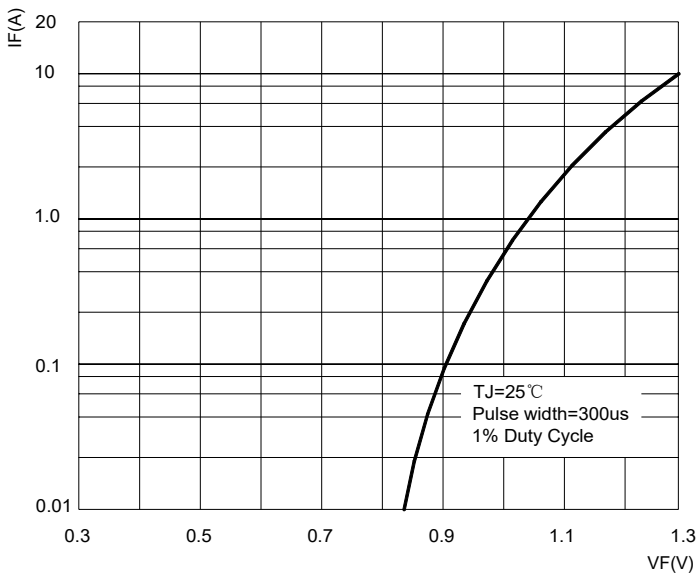
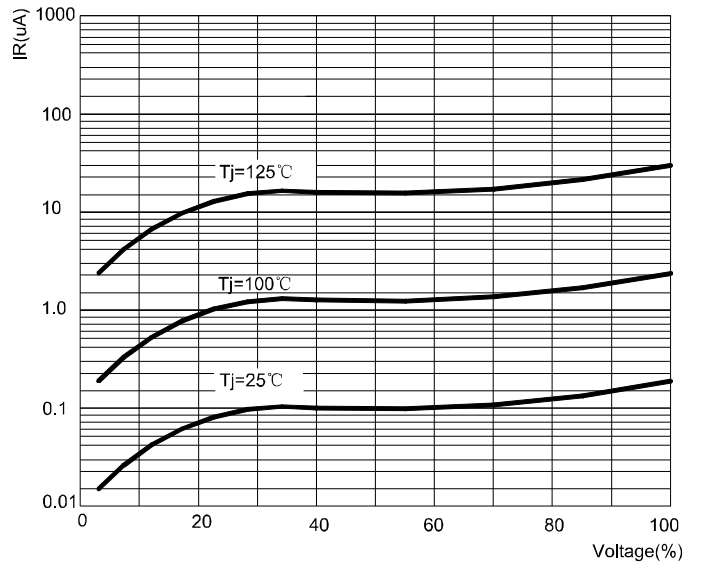
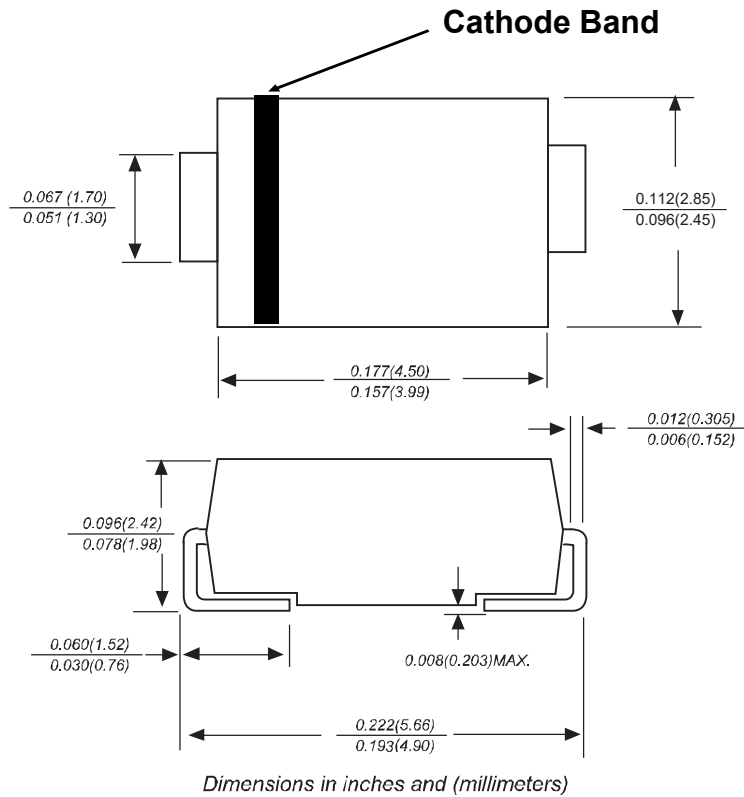


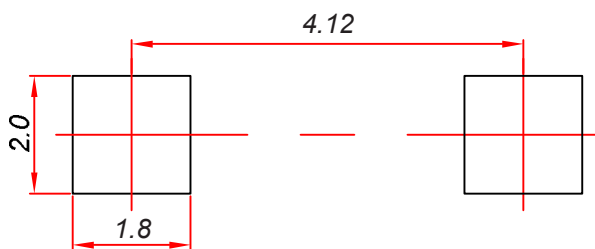
FIG.4: TYPICAL REVERSE CHARACTERISTICS



SMAG Package Outline Dimensions



SMAG Suggested Pad Layout



Note:

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

NOTICE

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

Reel Taping Specifications For Surface Mount Devices- SMAG

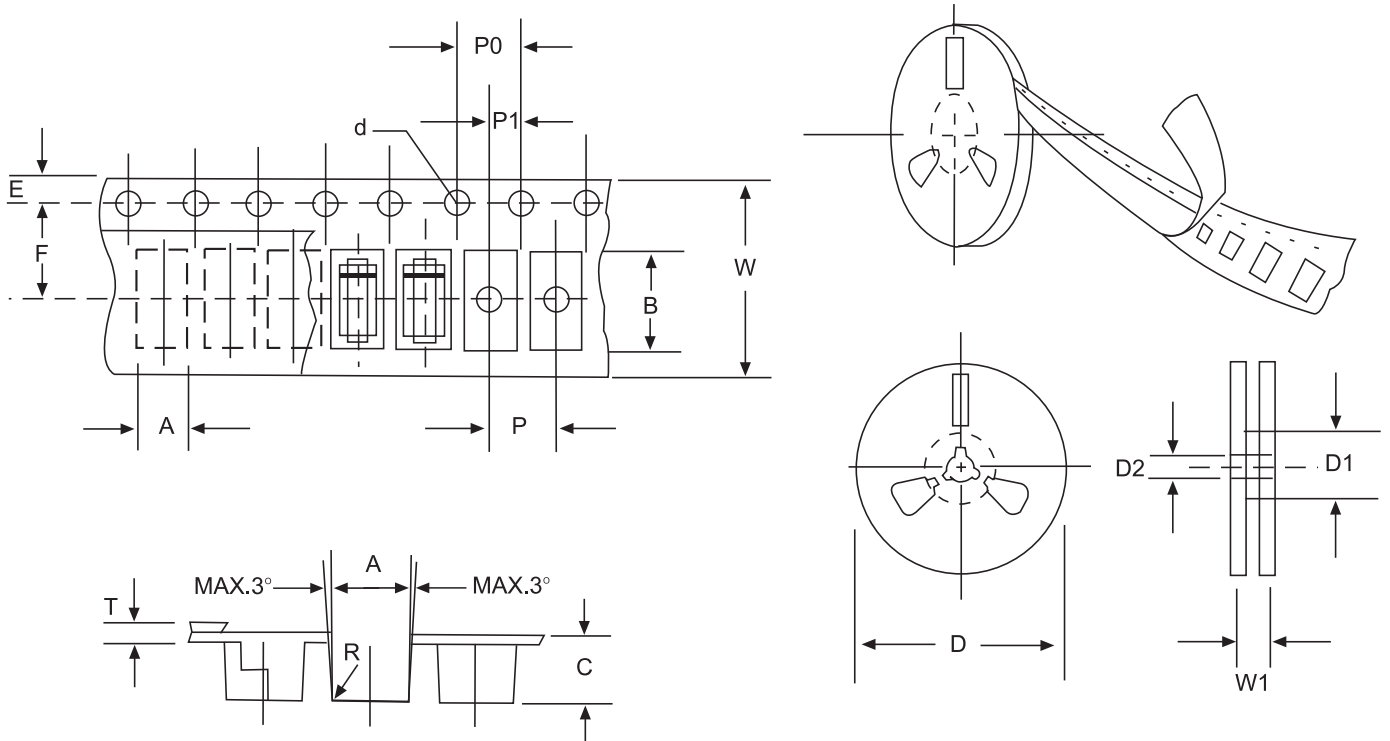


Fig:CONFIGURATION OF FLAT MELF TAPING

ITEM	SYMBOL	SMAG 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	1.55±0.05(0.061±0.002)
Reel outside diameter	D	279±2.0 (11± 0.079)
Reel inner diameter	D1	75±1.0 (2.95 ±0.039)
Feed hole diameter	D2	13±0.5(0.512±0.020)
Sprocket 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.