



SMA \* Plastic-Encapsulate Diodes

**S2A THRU S2M** General Purpose Rectifier Diodes

**Features**

- $I_{F(AV)}$  2A
- $V_{RRM}$  50V-1000V
- High surge current capability
- Polarity: Color band denotes cathode

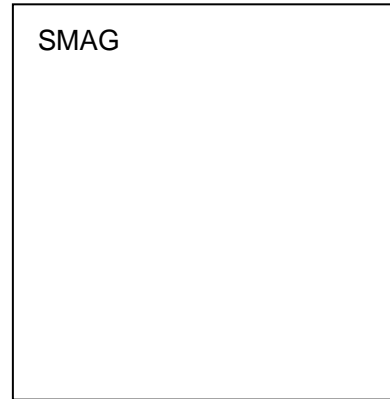
**Applications**

- Rectifier

**Marking**

- S2X

X : From A To M



**Limiting Values(Absolute Maximum Rating)**

Item	Symbol	Unit	Test Conditions	S2						
				A	B	D	G	J	K	M
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		50	100	200	400	600	800	1000
Maximum RMS Voltage	$V_{RMS}$	V		35	70	140	280	420	560	700
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, $T_J=100\text{ C}$	2.0						
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	60Hz Half-sine wave, 1 cycle, $T_a=25\text{ C}$	50						
Junction Temperature	$T_J$	°C		-55 ~ +150						
Storage Temperature	$T_{STG}$	°C		-55 ~ +150						

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

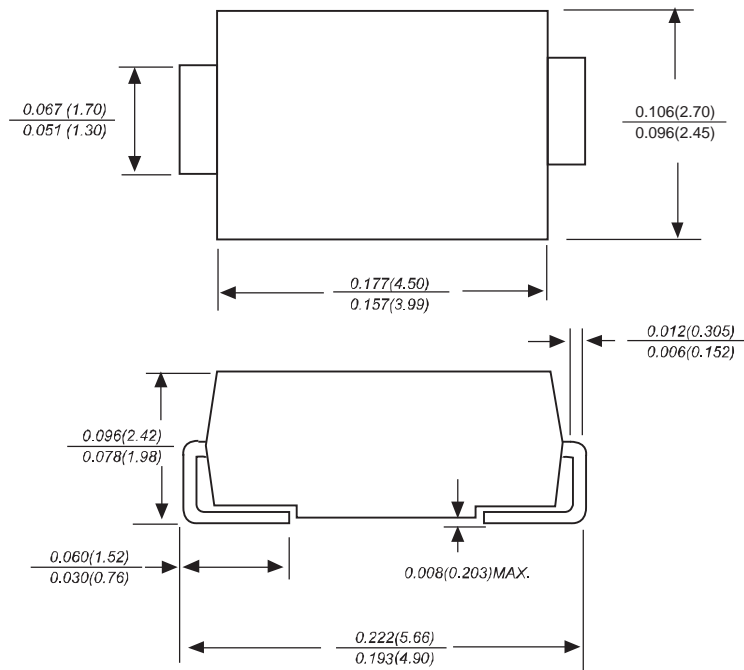
Item	Symbol	Unit	Test Condition	S2						
				A	B	D	G	J	K	M
Peak Forward Voltage	$V_F$	V	$I_F=2.0A$	1.1						
Peak Reverse Current	$I_{RRM1}$	µA	$V_{RM}=V_{RRM}$	$T_a=25\text{ °C}$						
	$I_{RRM2}$			$T_a=125\text{ °C}$						
Thermal Resistance(Typical)	$R_{\theta J-A}$	°C/W	Between junction and ambient	53						
	$R_{\theta J-L}$		Between junction and terminal	16						

**Notes:**

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.27" x 0.27" (7.0 mm x 7.0 mm) copper pad areas

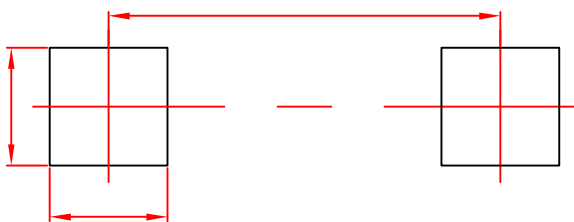


SMAG



Dimensions in inches and (millimeters)

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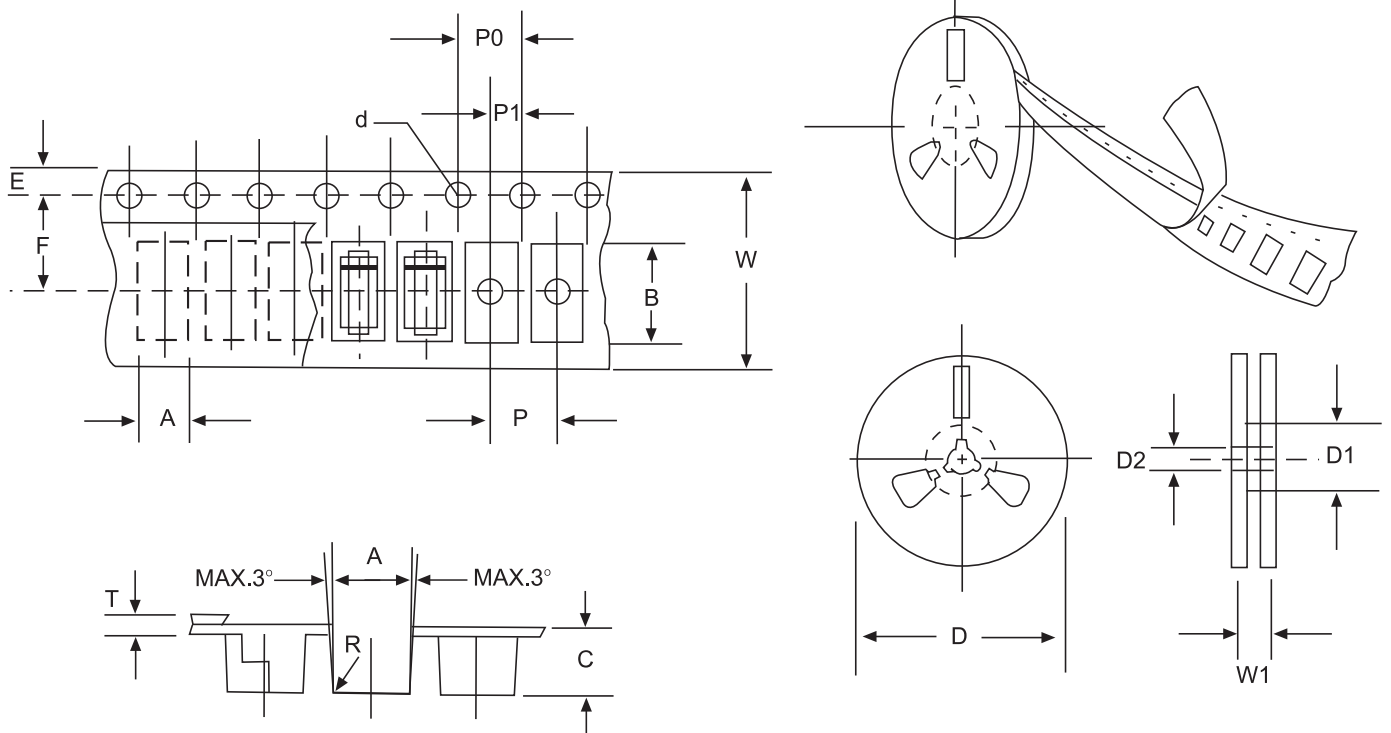
**Note:**

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

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- 6 & -UHV H V W K U H L J W W D N P R G L I L F D W L R Q V H Q K D Q F H P H Q W V R L P S U R K H L P H Q V  
 F K D Q J L W K I R X W C R W W B H Q S U R G K H F W H L Q G R & Q R D W V X D Q O L D E L O L W \ D U L V L C  
 R X W R I W K H D S S O L F D W L R Q R U X V H R I D Q \ S U R G X F W G H V F U L E H G K H

# Reel Taping Specifications For Surface Mount Devices- SMAG



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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)
Total 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 packed in accordance with EIA standard RS-481-A and specification given above.