SMAG Plastic-Encapsulate Diodes

Schottky Rectifier Diode

Features:

- $I_{F(AV)}$ 5A
- V_{RRM} 60V
- High surge current capability
- Polarity: Color band denotes cathode
- Low peak forward voltage

SMA

Applications:

- Rectifier

Marking

- KS56L:SS56L

Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	KS56L
Repetitive Peak Reverse Voltage	V_{RRM}	V		60
Maximum RMS Voltage	V_{RMS}	V		42
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave，Resistance load，T a=100℃	5.0
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave，1 cycle，Ta=25℃	120
Junction Temperature	T_J	℃		-55 ~ +150
Storage Temperature	T_{STG}	℃		-55 ~ +150

Electrical Characteristics (T=25℃ Unless otherwise specified）

Item	Symbol	Unit	Test Condition		KS56L	
Peak Forward Voltage	V_F	V	I_F=1.0A I_F=3.0A I_F=5.0A	Ta =25℃	0.34(TYP) 0.42(TYP) 0.47(TYP)	0.40(MAX) 0.45(MAX) 0.50(MAX)
Peak Reverse Current	I_{RRM1}	mA	V_{RM}=V_{RRM}	Ta =25℃	0.05(TYP)	0.3(MAX)
	I_{RRM2}			Ta =100℃	50	
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/ W	Between junction and ambient		60	
	$R_{\theta J-L}$		Between junction and lead		20	

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

FIG.1: FORWARD CURRENT DERATING CURVE

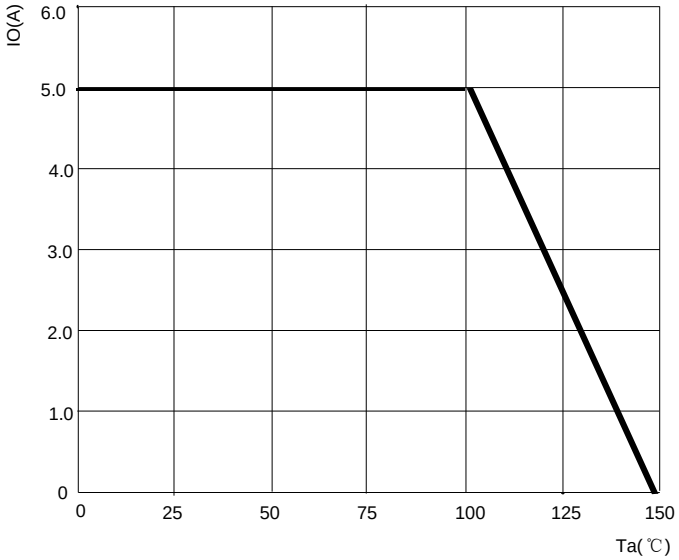


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

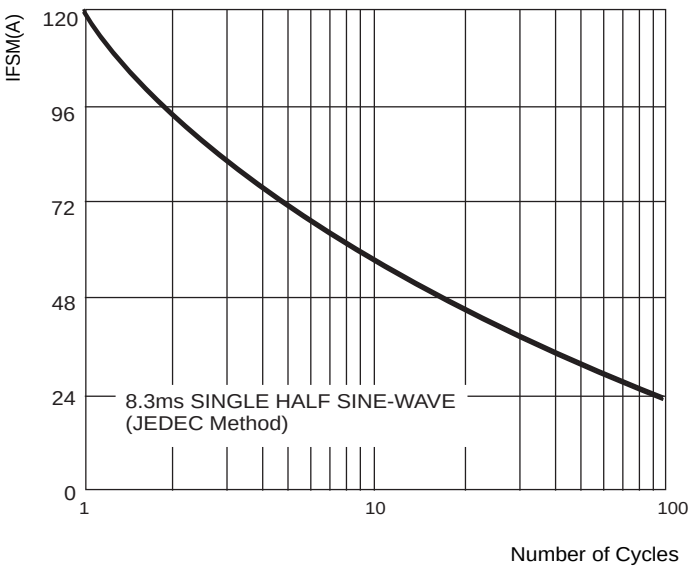


FIG.3: TYPICAL FORWARD CHARACTERISTICS

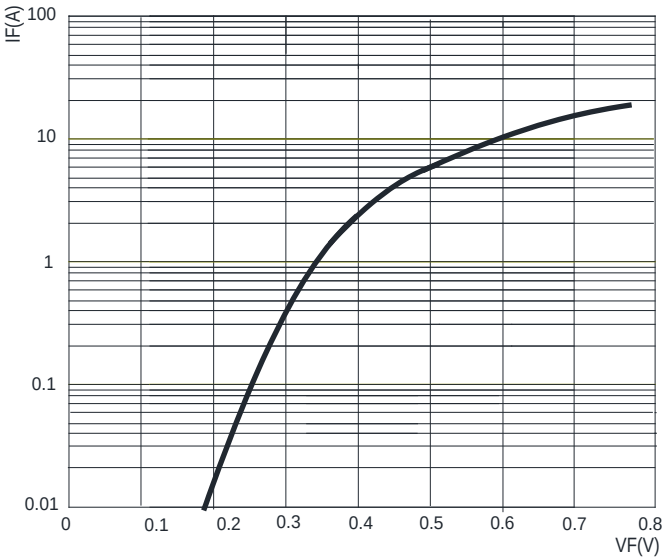
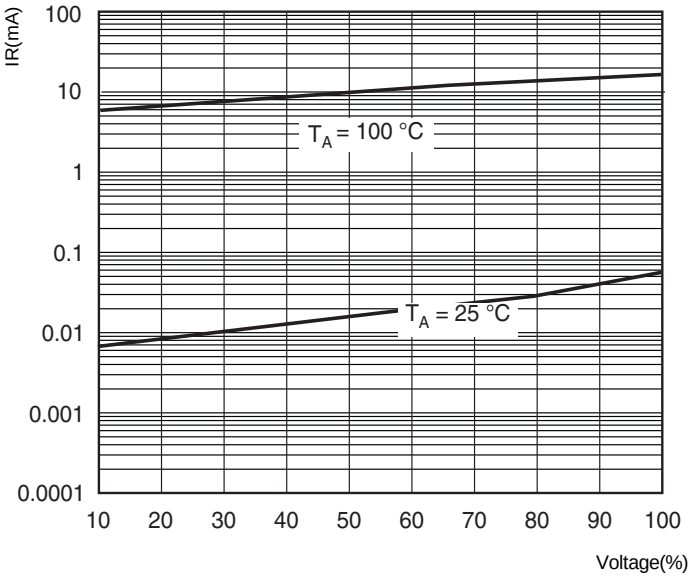
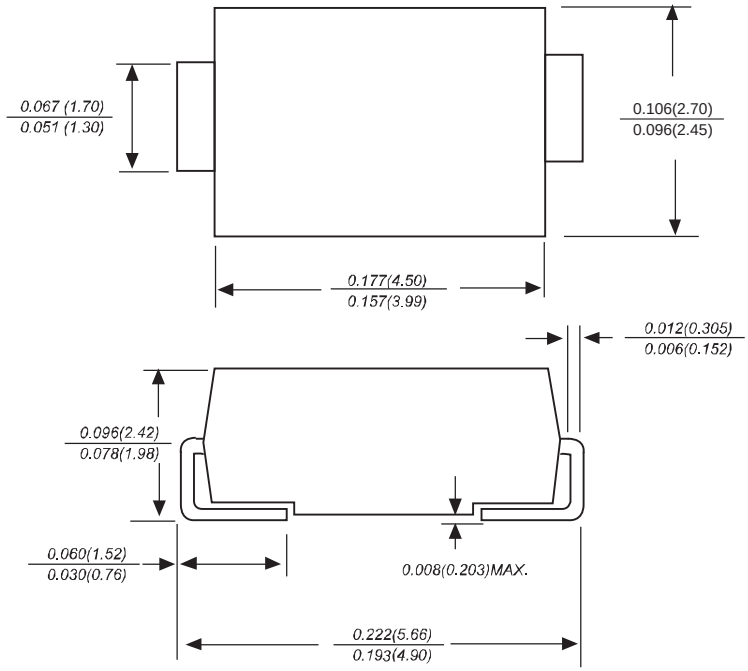


FIG.4：TYPICAL REVERSE CHARACTERISTICS

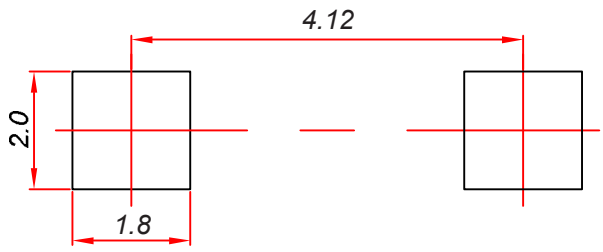


SMAG Package Outline Dimensions



Dimensions in inches and (millimeters)

SMAG Suggested Pad Layout



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

Reel Taping Specifications For Surface Mount Devices-SMAG

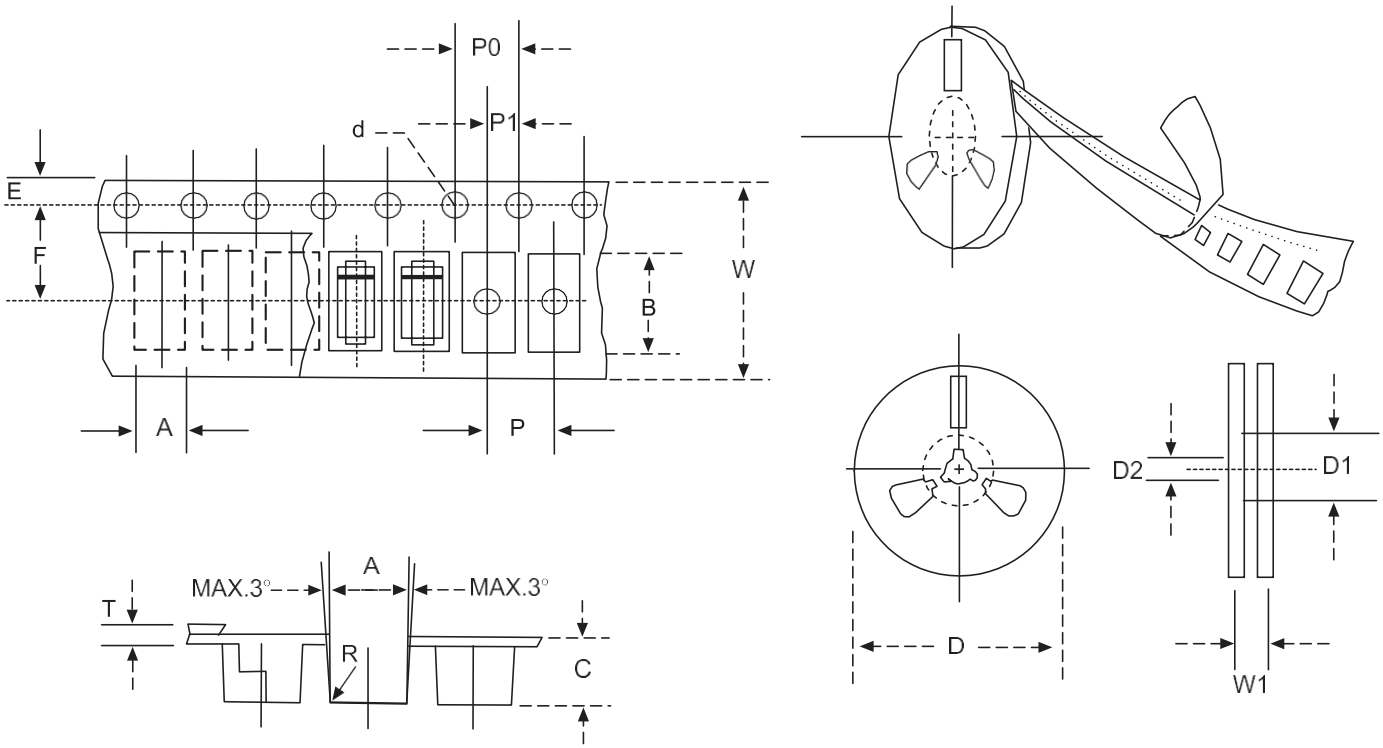


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

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