SS12 THRU SS1200

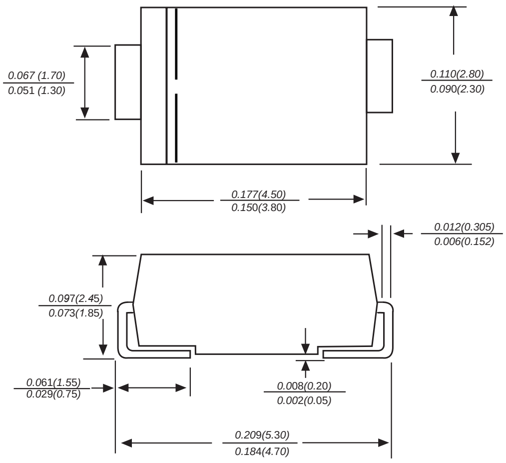
Reverse Voltage - 20 to 200 Volts   Forward Current - 1.0 Ampere

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Metal silicon junction,majority carrier conduction
- Low power loss,high efficiency
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250 °C/10 seconds at terminals

DO-214AC/SMA



Dimensions in inches and (millimeters)

Mechanical Data

Case : JEDEC DO-214AC/SMA molded plastic body
Terminals : Solderable per MIL-STD-750,Method 2026
Polarity : Color band denotes cathode end
Mounting Position : Any
Weight : 0.002 ounce, 0.07 grams

Maximum Ratings And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter Marking Code	SYMBOLS	MDD SS12	MDD SS13	MDD SS14	MDD SS15	MDD SS16	MDD SS18	MDD SS110	MDD SS1150	MDD SS1200	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum average forward rectified current	$I_{(AV)}$	1.0									A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method)	I_{FSM}	25									A
Maximum instantaneous forward voltage at 1.0A	V_F	0.55			0.70		0.85		0.9		V
Maximum DC reverse current at rated DC blocking voltage T_A=25℃ T_A=100℃	I_R	0.3 10.0					0.2 5.0		0.1 2.0		mA
Typical junction capacitance (NOTE 1)	C_J	110			80						pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	90.0									℃/W
Operating junction temperature range	T_J	-55 to +150									℃
Storage temperature range	T_{STG}	-55 to +150									℃

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.P.C.B. mounted with 2.0"x2.0"(5.0x5.0cm) copper pad areas

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Typical Characterisitics

Fig.1 Forward Current Derating Curve

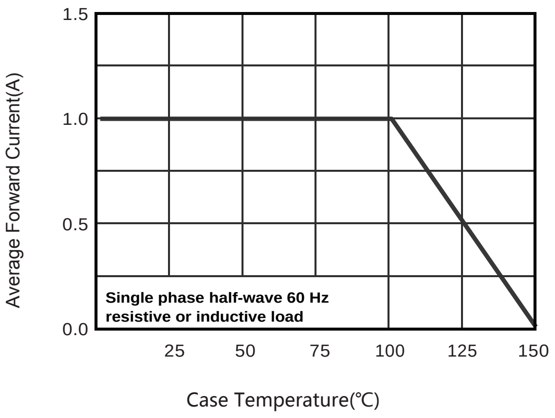


Fig.2 Typical Reverse Characteristics

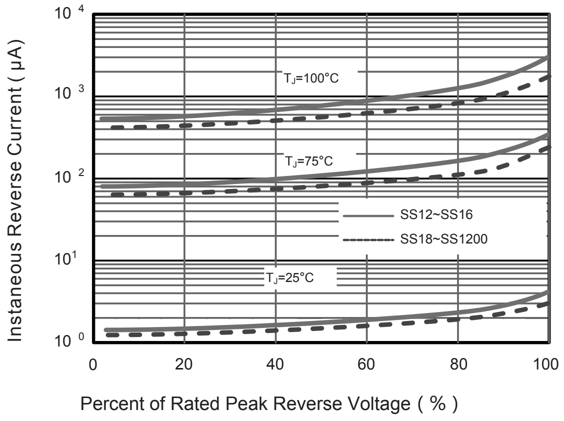


Fig.3 Typical Forward Characteristic

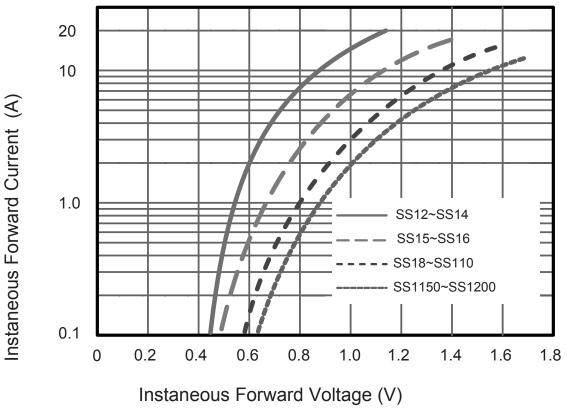


Fig.4 Typical Junction Capacitance

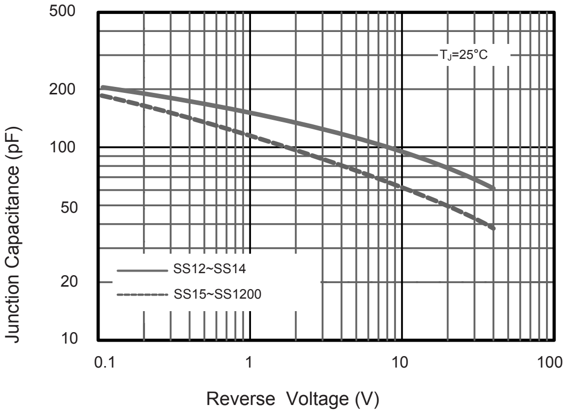


Fig.5 Maximum Non-Repetitive Peak
Forward Surage Current

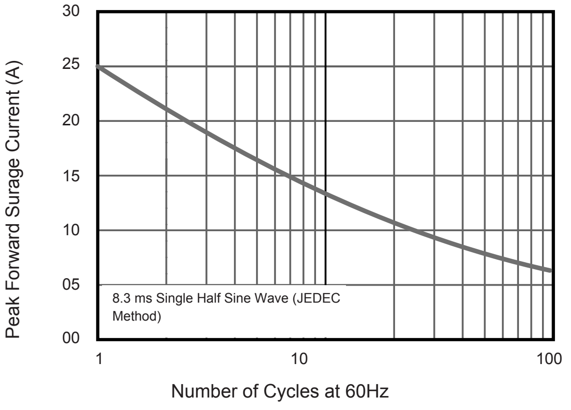
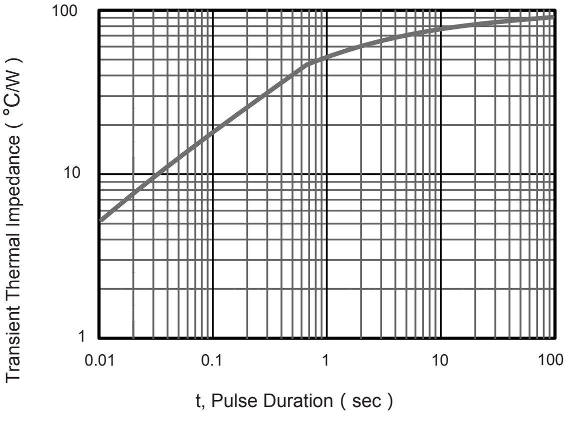
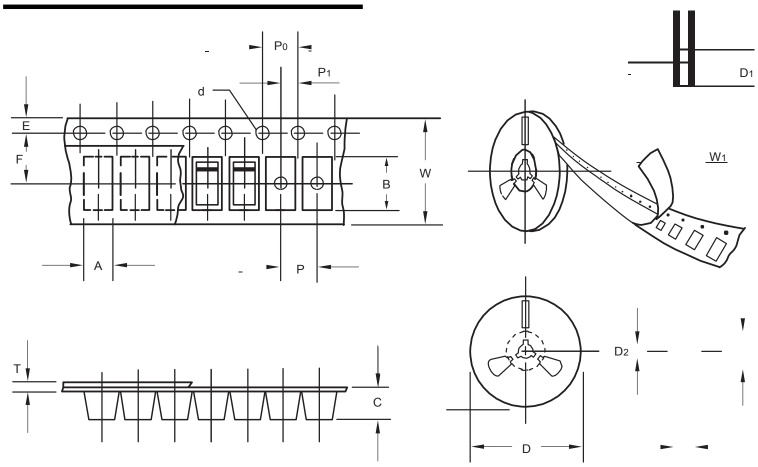


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.

Packing information



unit:mm

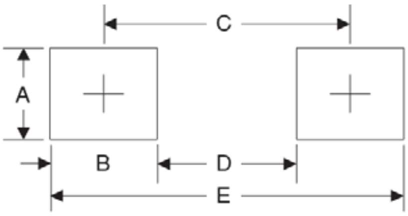
Item	Symbol	Tolerance	SMA
Carrier width	A	0.1	2.80
Carrier length	B	0.1	5.33
Carrier depth	C	0.1	2.36
Sprocket hole	d	0.05	1.50
13" Reel outside diameter	D	2.0	330.00
13" Reel inner diameter	D_1	min	50.00
7" Reel outside diameter	D	2.0	178.00
7" Reel inner diameter	D_1	min	62.00
Feed hole diameter	D_2	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	5.50
Punch hole pitch	P	0.1	4.00
Sprocket hole pitch	P_0	0.1	4.00
Embossment center	P_1	0.1	2.00
Overall tape thickness	T	0.1	0.28
Tape width	W	0.3	12.00
Reel width	W_1	1.0	18.00

Note:Devices are packed in accor dance with EIA standar RS-481-A and specifications listed above.

Reel packing

PACKAGE	REELSIZE	REEL (pcs)	COMPONENT SPACING (m/m)	BOX (pcs)	INNER BOX (m/m)	REEL DIA, (m/m)	CARTON SIZE (m/m)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
SMA	13"	5,000	4.0	10,000	340*350*40	330	370*370*370	80,000	11.0
SMA	13"	7,500	4.0	15,000	340*350*40	330	370*370*370	120,000	14.5

Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	1.68	0.066
B	1.52	0.060
C	3.93	0.154
D	2.41	0.095
E	5.45	0.215

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