

SS14

1.0AMP. SCHOTTKY BARRIER RECTIFIERS

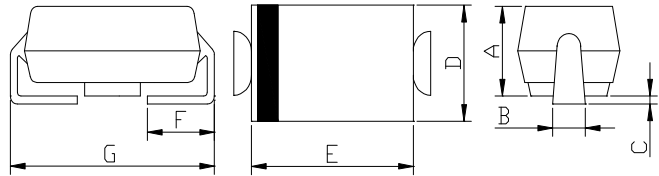
FEATURE

- For surface mounted application
- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- High surge current capability
- High temperature soldering guaranteed
260°C/10 seconds at terminals.

MECHANICAL DATA

- Terminal: Solder plated
- Case: Molded with UL-94 Class V-0 recognized
- Polarity: color band denotes cathode
- Packaging: 12mm tape per EIA STD RS-481

SMA(DO-214AC)



NO	Measurement(mm)
A	2.0~2.4
B	1.0~1.5
C	0.23MAX
D	2.4~2.8
E	3.8~4.2
F	1.0~1.6
G	4.8~5.2

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	SYM BOL	SS14	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS Voltage	V_{RMS}	28	V
Maximum DC blocking Voltage	V_{DC}	40	V
Maximum Average Forward Rectified Current at $T_L = 90^\circ\text{C}$	$I_{F(AV)}$	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30.0	A
Maximum Forward Voltage at 1.0A DC	V_F	0.55	V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 100^\circ\text{C}$	I_R	0.1 10.0	mA
Typical Junction Capacitance (Note1)	C_J	110	pF
Typical Thermal Resistance (Note2)	$R_{(JC)}$	28	$^\circ\text{C/W}$
Storage Temperature	T_{STG}	-55 to +150	$^\circ\text{C}$
Operating Junction Temperature	T_J	-55 to +125	$^\circ\text{C}$

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Measured on P.C.Board with 0.2×0.2”(5.0×5.0mm)Copper Pad Areas.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

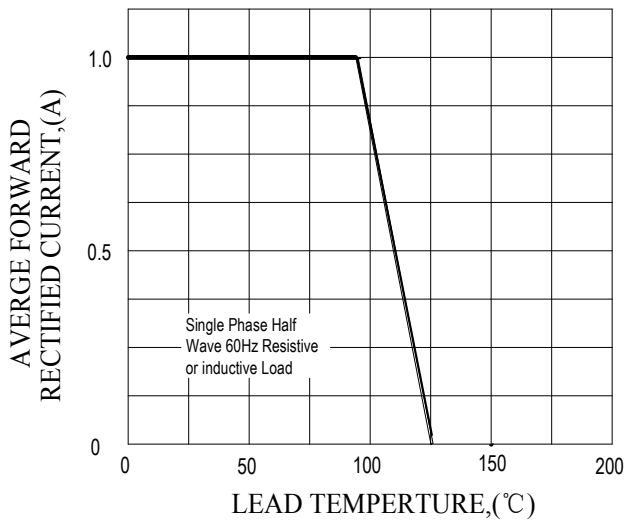


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

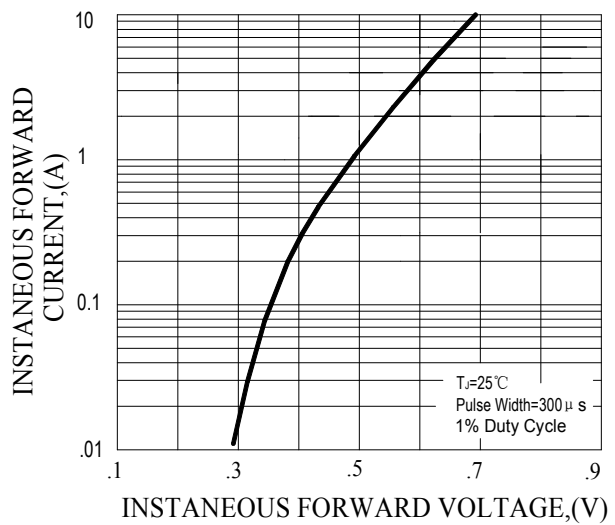


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

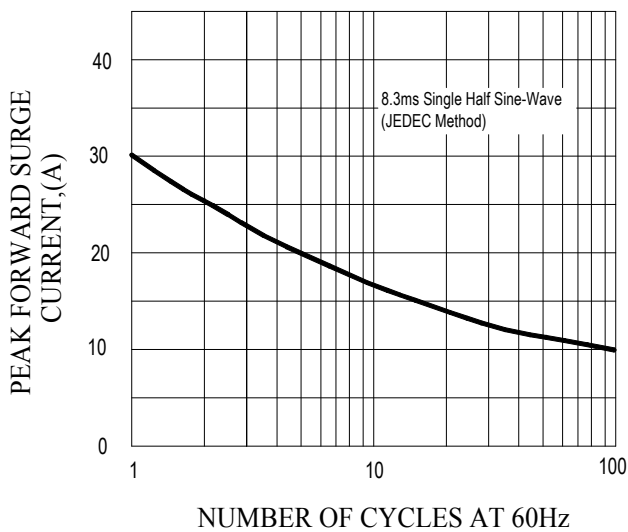
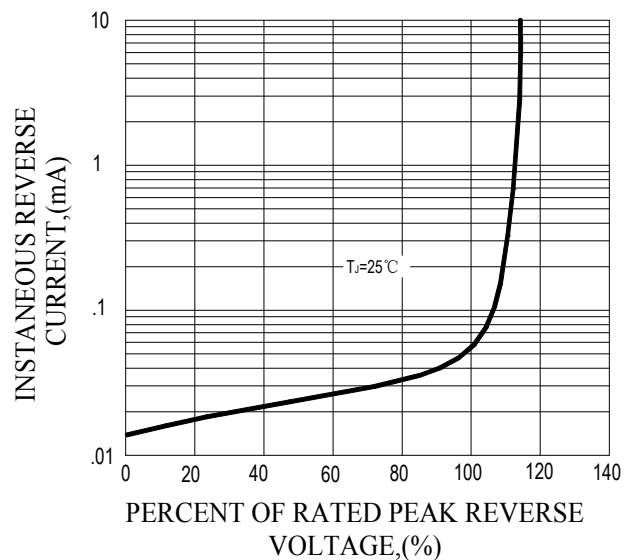
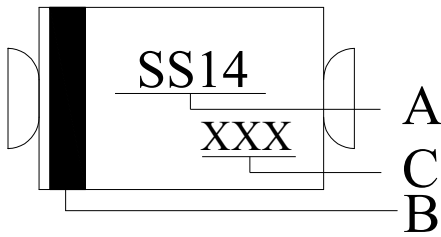


FIG.4-TYPICAL REVERSE CHARACTERISTICS



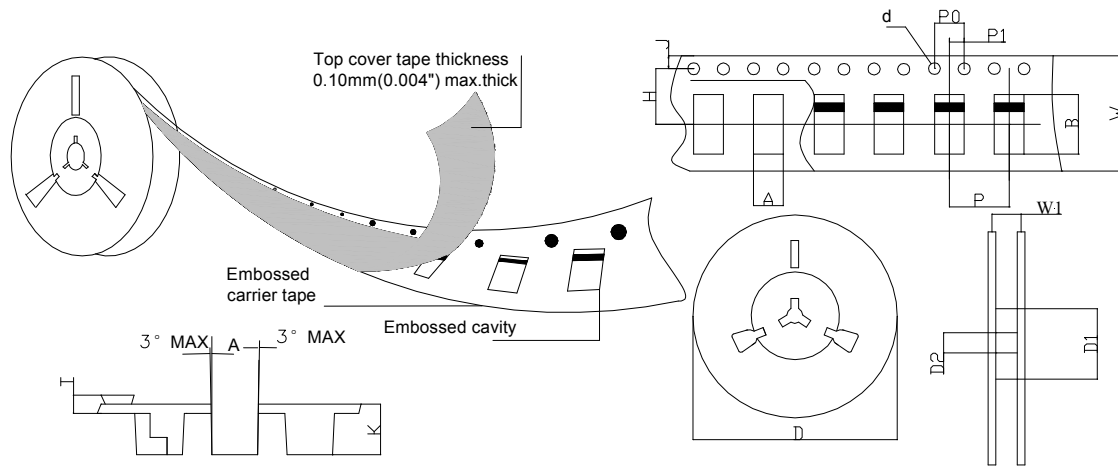
Marking and packaging illustration

1、Marking



SYMBOL	explanation
A	Product name
B	Color Band Denotes Cathode
C	Date code

2、Packaging



SPECIFICATIONS mm(inch)		PACKAGE
SYMBOL		SMA(DO-214AC)
ITEM		
Carrier width	A	3.17(0.125)Max
Carrier length	B	5.35(0.211)Max
Sprocket hole	d	ø1.55(0.061)Typ
Reel outer diameter	D	330.0(13)Typ
Reel inner diameter	D1	50.0(1.969)Min
Feed hole diameter	D2	13.0(0.512)Typ
Sprocket hole position	J	1.75(0.069)Typ
Punch hole position	H	5.55(0.219)Typ
Carrier depth	K	2.42(0.095)Typ
Punch hole pitch	P	4.00(0.157)Typ
Sprocket hole pitch	P0	4.00(0.157)Typ
Embossment center	P1	2.00(0.079)Typ
Overall tape thickness	T	0.30(0.012)Typ
Tape width	W	12.0(0.472)Typ
Reel width	W1	12.4(0.488)Min



样品测试报告

样品名称	SS14	记录	陈亮
样品商标	中性	审核	<i>王化</i>

电参数测试					直方图分布											
测试条件	IF=1.0A	VR=40V	IR=0.2mA	IF=0.5A,IR=1A, Recover to0.25A	V _F			判定	合格							
合格标准	V _F (V) ≤ 0.550	I _R (μA) ≤ 100	V _R (V) ≥ 40	TRR(nS)	MAX	MIN	R	AVG	σ	CPK						
1	0.477	10.37	52.6		0.488	0.472	0.016	0.478	0.005	5.15						
2	0.473	11.98	52.4		<p>VF直方图</p>											
3	0.473	10.81	49.9													
4	0.478	8.93	50.9													
5	0.476	12.77	51.1													
6	0.475	9.73	50.9													
7	0.485	12.32	49.9													
8	0.485	10.60	52.6													
9	0.486	9.01	49.3													
10	0.481	10.78	51.3													
11	0.479	10.77	52.4													
12	0.488	10.71	52.0													
13	0.472	8.86	52.4													
14	0.485	11.03	52.6								I _R			判定	合格	
15	0.481	11.56	49.4								MAX	MIN	R	AVG	σ	CPK
16	0.479	8.79	51.8		12.801	8.722	4.079	10.665	1.307	22.79						
17	0.476	12.36	52.4		<p>IR直方图</p>											
18	0.475	8.78	51.7													
19	0.478	10.46	50.3													
20	0.474	11.00	49.4													
21	0.473	9.02	49.2													
22	0.484	12.79	50.7													
23	0.476	12.73	49.4													
24	0.475	9.43	51.0													
25	0.473	10.48	52.4													
26	0.472	9.72	50.0													
27	0.483	9.51	52.4													
28	0.480	10.04	50.2													
29	0.473	10.49	49.1								V _R			判定	合格	
30	0.479	12.80	51.6								MAX	MIN	R	AVG	σ	CPK
31	0.472	12.14	50.6		53	49	4	51	1.154	3.15						
32	0.472	9.73	49.2		<p>VR直方图</p>											
33	0.483	11.51	51.4													
34	0.483	11.02	51.2													
35	0.473	12.76	49.4													
36	0.484	8.72	51.2													
37	0.480	8.76	49.9													
38	0.475	11.86	49.8													
39	0.474	11.45	50.2													
40	0.475	10.06	51.4													
											TRR			判定	FALSE	
											MAX	MIN	R	AVG	σ	CPK
											0	0	0	#DIV/0!	#DIV/0!	未测试
											<p>TRR直方图</p>					