

SS14

1.0AMP. SCHOTTKY BARRIER RECTIFIERS

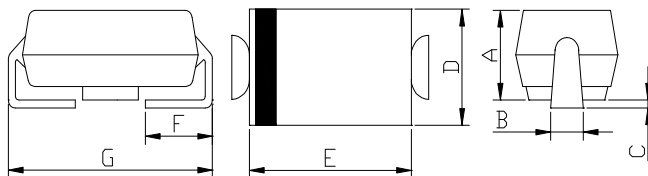
FEATURE

- 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

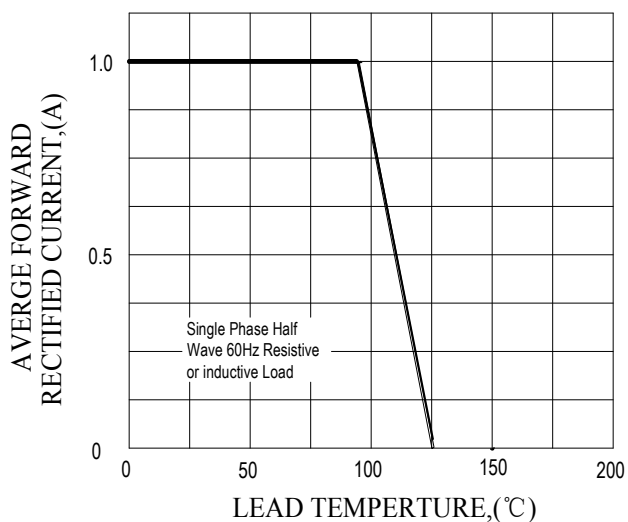


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

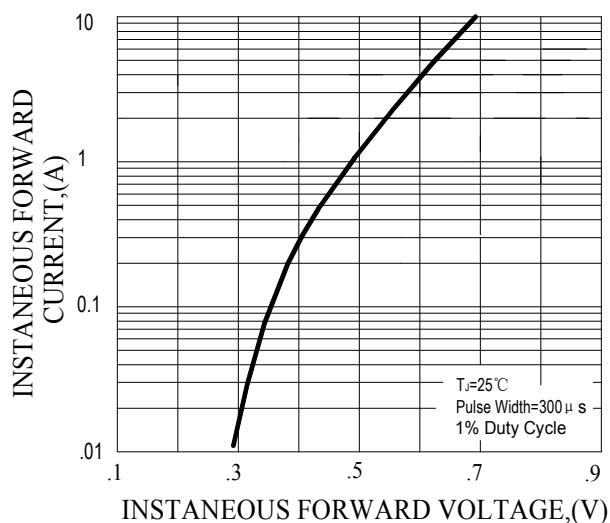


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

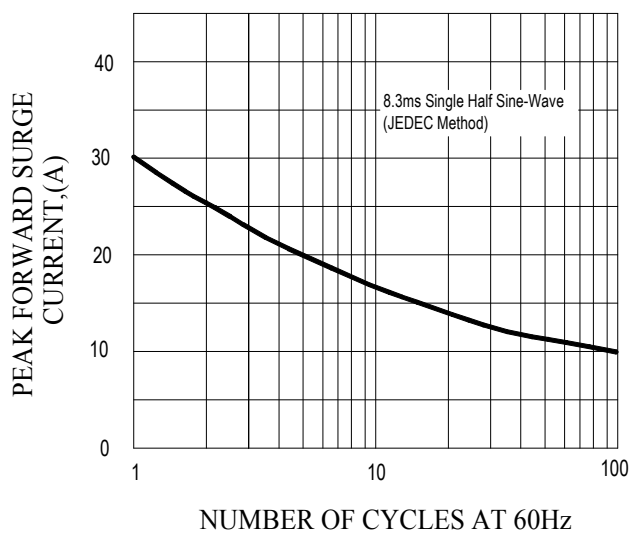
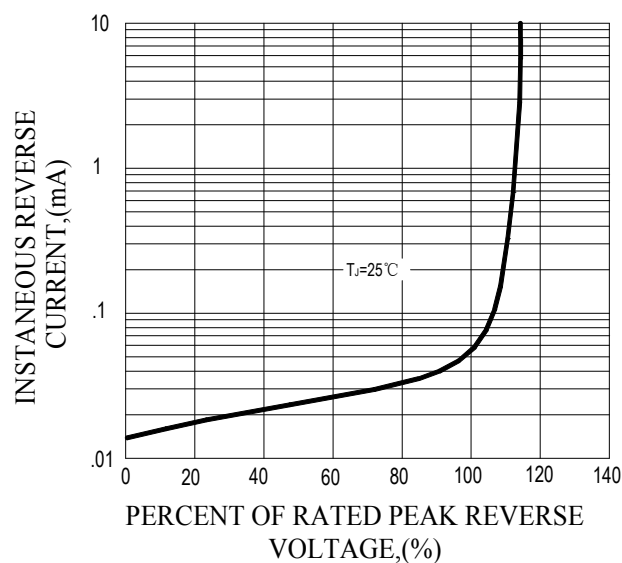
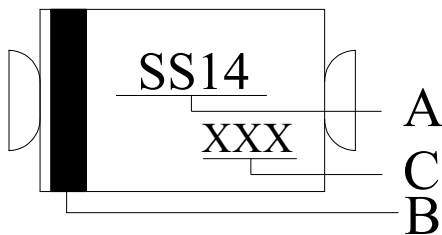


FIG.4-TYPICAL REVERSE CHARACTERISTICS



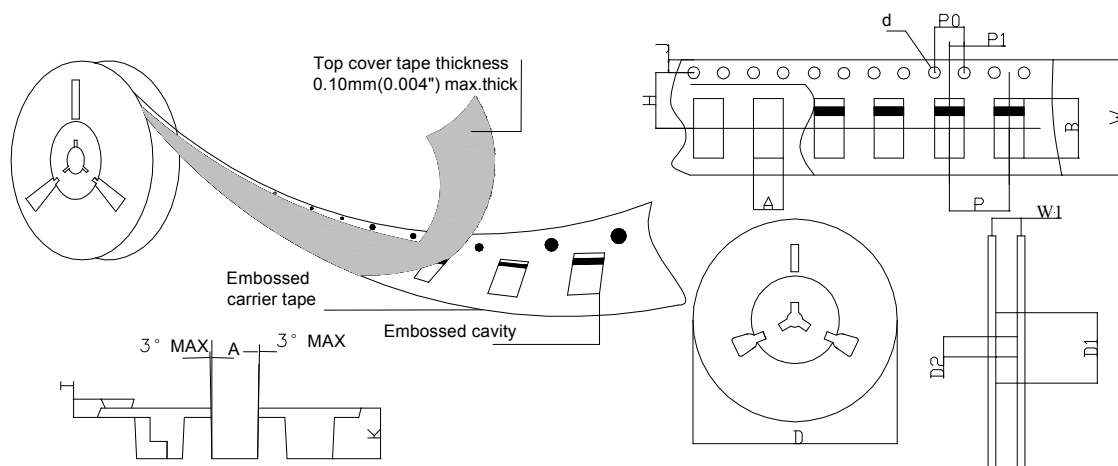
Marking and packaging illustration

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										
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)	I _R (uA)	V _R (V)	TRR(nS)	MAX	MIN	R	AVG	σ	CPK								
	<= 0.550	<= 100	>= 40		0.488	0.472	0.016	0.478	0.005	5.15								
1	0.477	10.37	52.6		VF直方图													
2	0.473	11.98	52.4															
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		I _R			判定	合格									
14	0.485	11.03	52.6		MAX	MIN	R	AVG	σ	CPK								
15	0.481	11.56	49.4		12.801	8.722	4.079	10.665	1.307	22.79								
16	0.479	8.79	51.8		IR直方图													
17	0.476	12.36	52.4															
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		V _R			判定	合格									
29	0.473	10.49	49.1		MAX	MIN	R	AVG	σ	CPK								
30	0.479	12.80	51.6		53	49	4	51	1.154	3.15								
31	0.472	12.14	50.6		VR直方图													
32	0.472	9.73	49.2															
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								
					TRR直方图													