SS10150

10.0AMPS. SCHOTTKY BARRIER RECTIFIERS

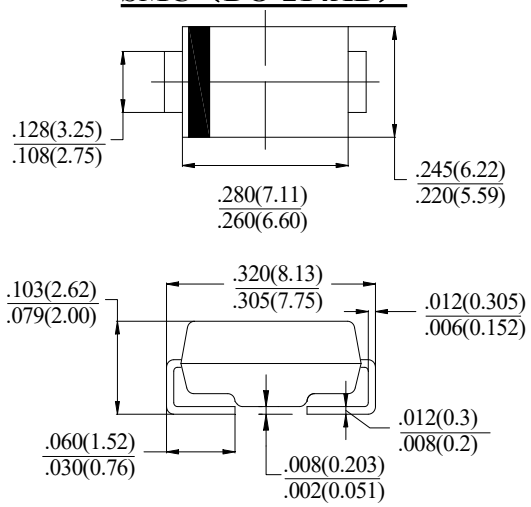
FEATURE

. 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.
. For surface mounted application.
. Easy pick and place.

MECHANICAL DATA

. Terminal: Solder plated
. Case: Molded with UL-94 Class V-0 recognized
Flame Retardant Epoxy
. Polarity: color band denotes cathode

SMC（DO-214AB）



Dimensions in inches and (millimeters)

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

MAXIMUM RATINGS (T_C=25℃ unless otherwise noted)

Parameter	SYMBOL	SS10150	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	150	V
Maximum RMS Voltage	V_{RMS}	105	V
Maximum DC blocking Voltage	V_{DC}	150	V
Average Forward Rectified Current	$I_{F(AV)}$	10.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150	A
Typical Junction Capacitance (Note1)	C_J	200	pF
Storage Temperature	T_{STG}	-55 to + 150	°C
Operating Junction Temperature	T_J	-55 to + 150	°C

ELECTRICAL CHARACTERISTICS (T_C=25℃ unless otherwise noted)

Parameter		SYMBOL	Min	Typ	Max	Units
Reverse Breakdown Voltage at Ir=0.20mA		V_{BR}	150	-----	-----	V
Instantaneous Forward	@T_J=25°C	V_F	-----	0.82	0.95	V
voltage at 10A	@T_J=100°C		-----	-----	0.85	
Instantaneous Forward	@T_J=25°C	V_F	-----	0.68	0.72	V
voltage at 2A	@T_J=100°C		-----	-----	0.62	
Reverse current	@T_J=25°C	I_R	-----	-----	5.0	uA
at rated DC blocking voltage	@T_J=100°C		-----	50.0	200.0	

THERMAL CHARACTERISTICS(T_C=25℃ unless otherwise noted)

Parameter	SYMBOL	SS10150	Units
Typical Thermal Resistance (Note2)	$R_{(JA)}$ $R_{(JC)}$	55 15	℃/W

Note:
1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Measured on P.C.Board with 15.0mm*15.0mm*1.6mm Copper Pad Areas

Rating and Characteristic Curves

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

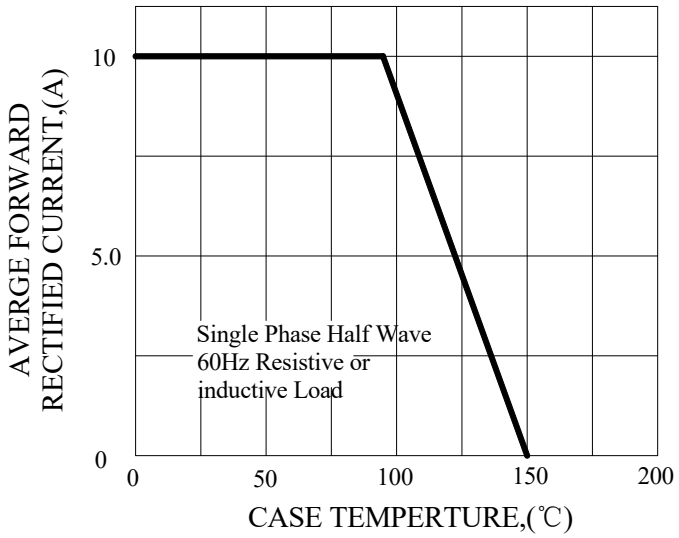


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

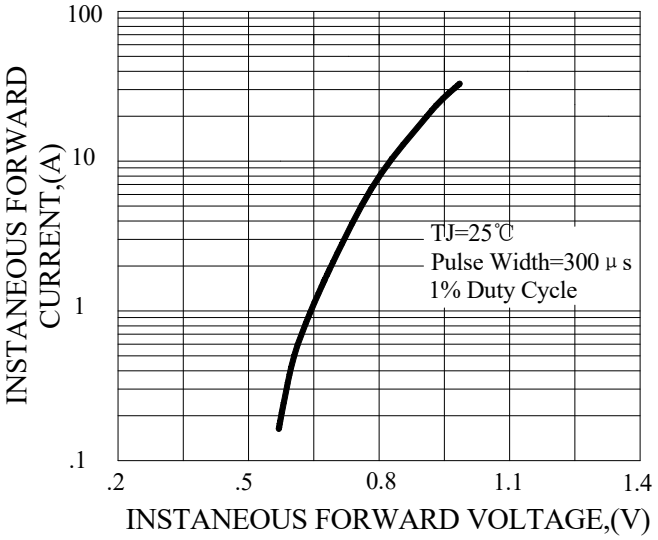


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

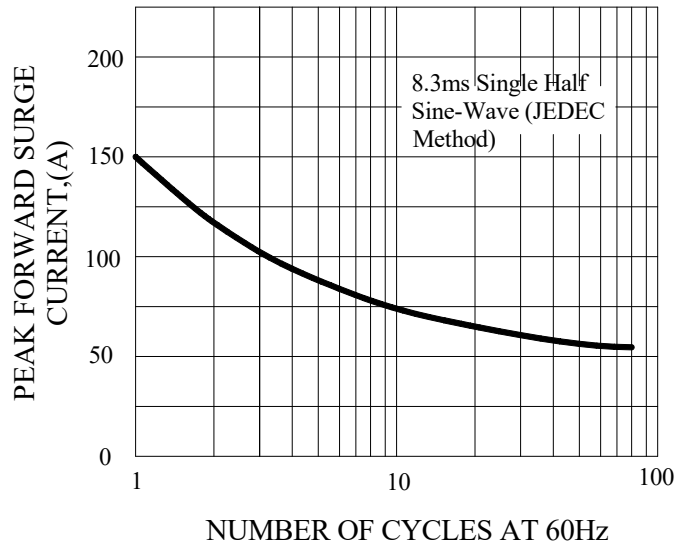
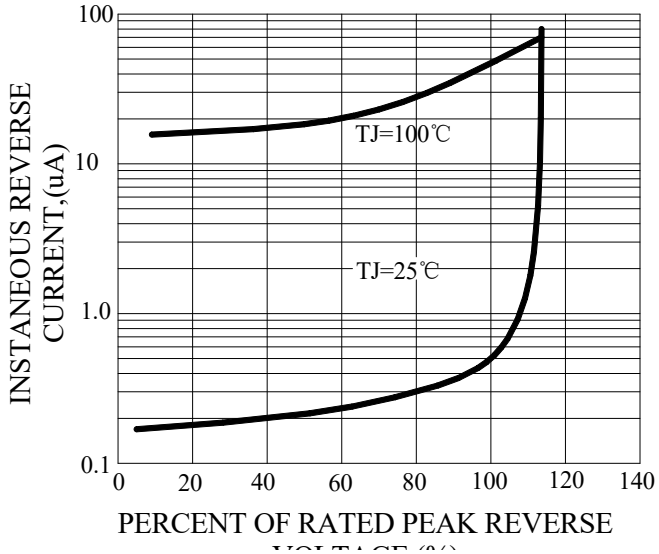
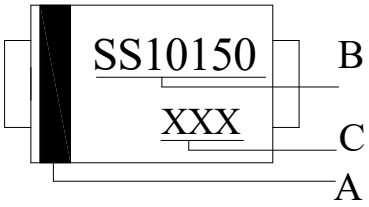


FIG.4-TYPICAL REVERSE CHARACTERISTICS



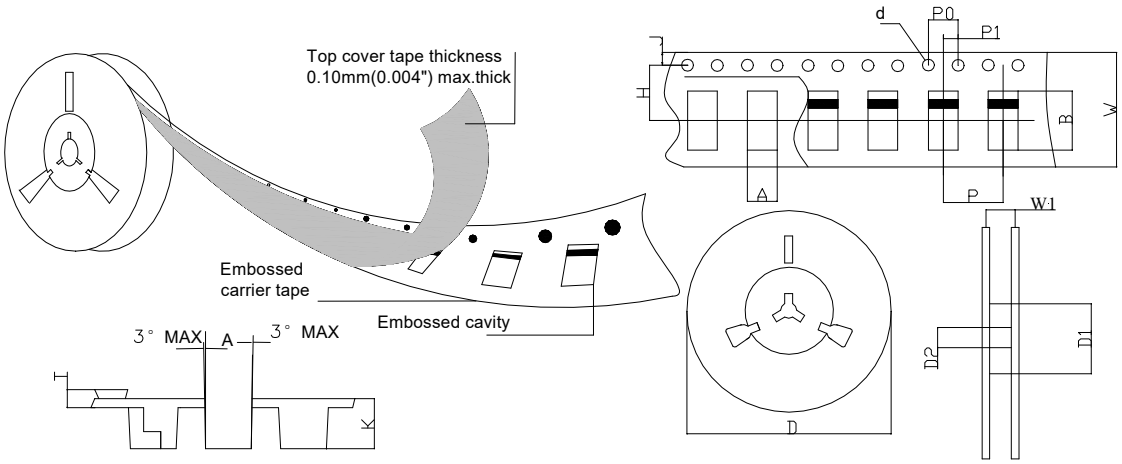
Marking 、Packaging Illustration

1、Marking



SYMBOL	Explanation
A	Color Band Denotes Cathode
B	Product name
C	Date Code

2、Packaging



SPECIFICATIONS mm(inch)		PACKAGE	SPECIFICATIONS mm(inch)		PACKAGE
ITEM	SYMBOL	SMC (DO-214AB)	ITEM	SYMBOL	SMC (DO-214AB)
Carrier width	A	6.15(0.242)Max	Carrier depth	K	2.54(0.100)Typ
Carrier length	B	8.41(0.331)Max	Punch hole pitch	P	8.00(0.315)Typ
Sprocket hole	d	ø1.55(0.061)Typ	Sprocket hole pitch	P0	4.00(0.157)Typ
Reel outer diameter	D	330.0(13.0)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	74.0(2.913)Min	Overall tape thickness	T	0.25(0.010)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	16.0(0.430)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	16.5(0.650)Min
Punch hole position	H	7.50(0.295)Typ			