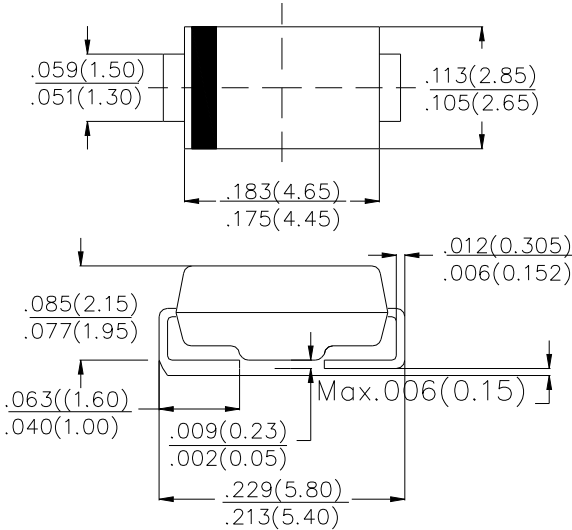


SS310A	
3.0AMPS. SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS	
<p>FEATURES</p> <ul style="list-style-type: none"> • For surface mounted application • High current capability • Low forward voltage drop • Low power loss, high efficiency • High surge current capability • High temperature soldering guaranteed: 250°C/10 seconds at terminals. <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case: Molded plastic • Epoxy: UL94V-0 rate flame retardant (Halogen free) • Lead: MIL-STD- 202E, Method 208 guaranteed • Polarity:Color band denotes cathode end • Packaging: 12mm tape per EIA STD RS-481 • Weight: 0.073 grams 	<p>SMA (DO-214AC)</p>  <p>Dimensions in inches and (millimeters)</p>

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

MAXIMUM RATINGS ($T_C=25^\circ\text{C}$ unless otherwise noted)

Parameter	SYMBOL	SS310A	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC blocking Voltage	V_{DC}	100	V
Average Forward Rectified Current at $T_L \leq 90^\circ\text{C}$	$I_{F(AV)}$	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	80	A
Typical Junction Capacitance (Note1)	C_J	130	pF
Storage Temperature	T_{STG}	-55 to + 150	$^\circ\text{C}$
Operating Junction Temperature	T_J	-55 to + 150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_C=25^\circ\text{C}$ unless otherwise noted)

Parameter	SYMBOL	Min	Typ	Max	units
Instantaneous Forward voltage at 3A	V_F	----	0.77	0.85	V
@ $T_J=25^\circ\text{C}$		----	0.68	----	
reverse current at rated DC blocking voltage	I_R	----	----	0.1	mA
@ $T_J=25^\circ\text{C}$		----	----	20.0	
@ $T_J=125^\circ\text{C}$					

THERMAL CHARACTERISTICS ($T_C=25^\circ\text{C}$ unless otherwise noted)

Thermal Characteristic	SYMBOL	SS310A	units
Typical Thermal Resistance (Note2)	$R_{(JA)}$	85	$^\circ\text{C}/\text{W}$
	$R_{(JC)}$	25	

Note:

1. $T_J=25^\circ\text{C}$, $V_R = 4V_{DC}@1\text{Mhz}$
2. Measured on P.C.Board with 15.0mm*15.0mm*1.6mmCopper Pad Areas

RATING AND CHARACTERISTIC CURVES (SS310A)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

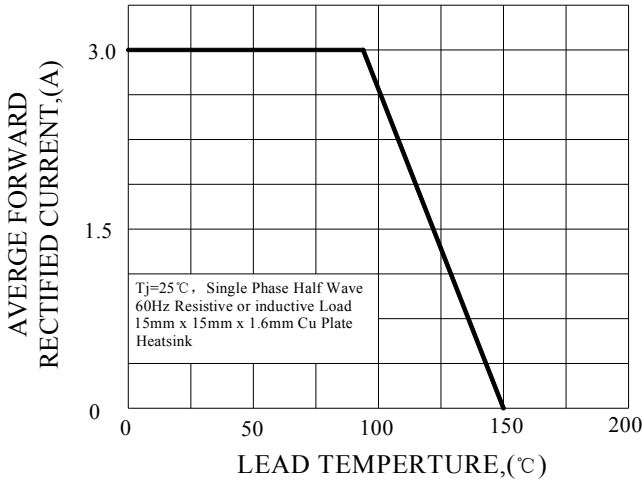


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

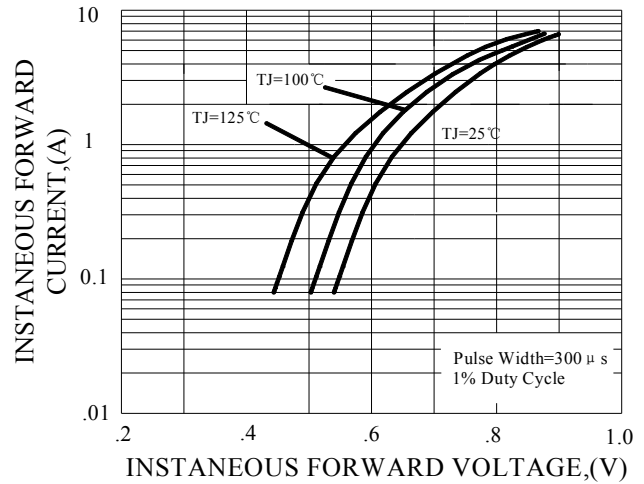


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

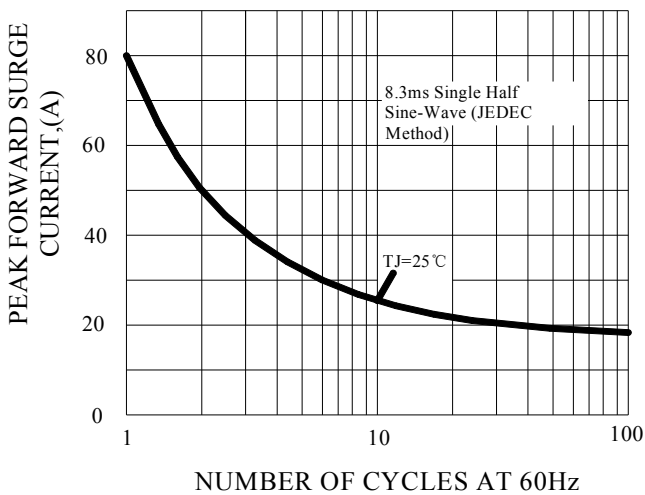


FIG.4-TYPICAL REVERSE CHARACTERISTICS

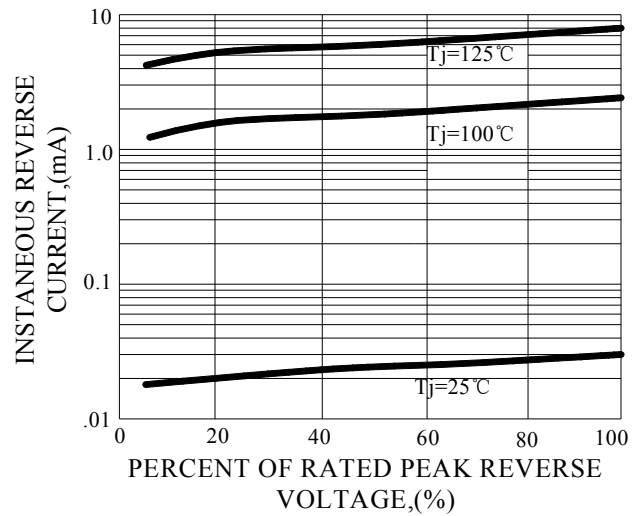
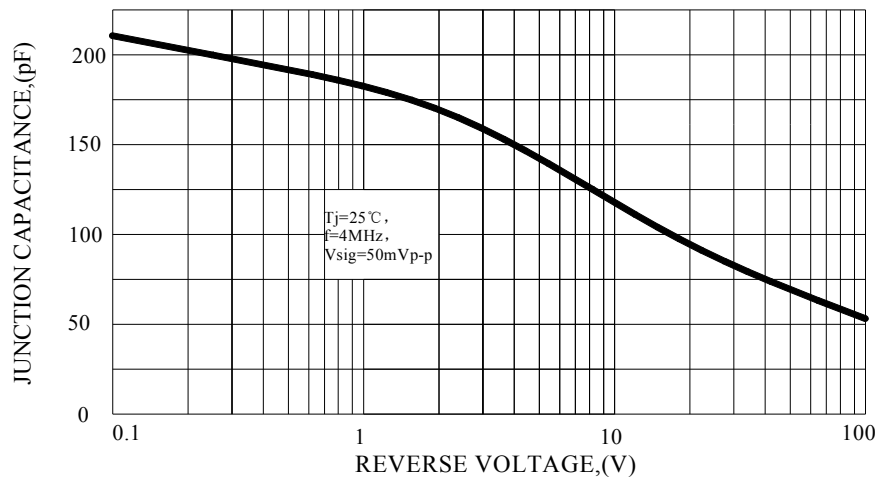
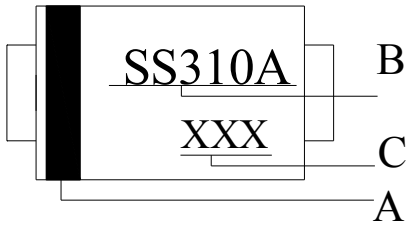


FIG.5-TYPICAL JUNCTION CAPACITANCE



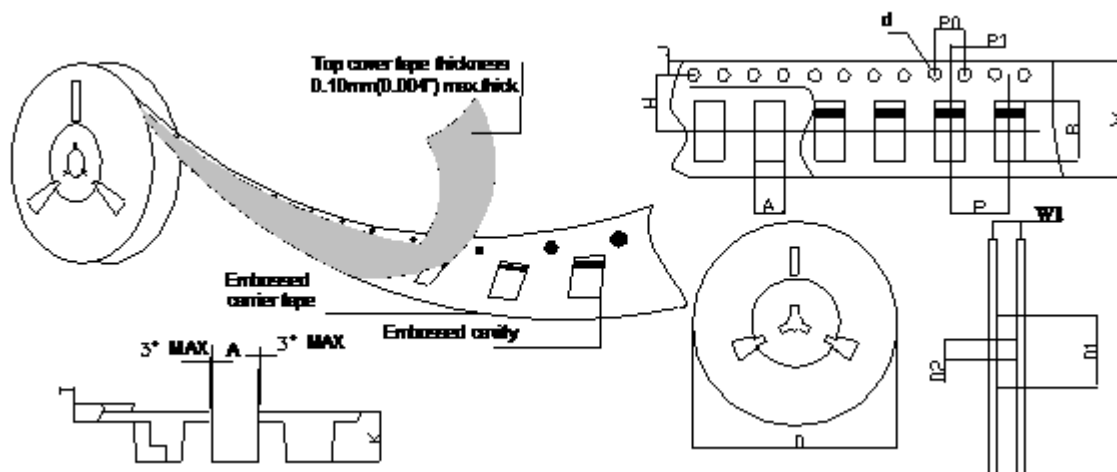
Marking and packaging illustration

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	SYM BOL	SMA(DO-214 AC)	ITEM	SYM BOL	SMA(DO-214A C)
Carrier width	A	3.17(0.125)Max	Carrier depth	K	2.42(0.095)Typ
Carrier length	B	5.81(0.229)Max	Punch hole pitch	P	4.00(0.157)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)Typ	Embossment center	P1	2.00(0.079)Typ
Reel inner diameter	D1	50.0(1.969)Min	Overall tape thickness	T	0.30(0.012)Typ
Feed hole diameter	D2	13.0(0.512)Typ	Tape width	W	12.0(0.472)Typ
Sprocket hole position	J	1.75(0.069)Typ	Reel width	W1	12.4(0.488)Min
Punch hole position	H	5.55(0.219)Typ			