

**S310R**

**3.0AMPS. SCHOTTKY BARRIER RECTIFIERS**

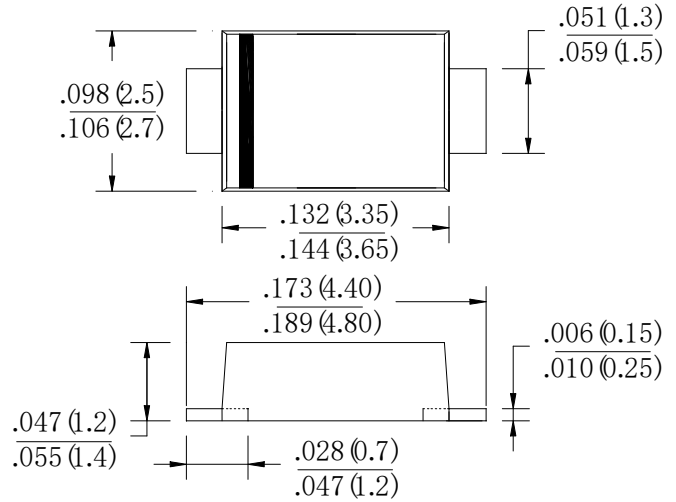
**FEATURE**

- . 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
- . Packaging: 12mm tape per EIA STD RS-481

**SMF**



Dimensions in inches and (millimeters)

**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	S310R	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
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	80.0	A
Maximum Forward Voltage at 3.0A DC	$V_F$	0.85	V
Maximum DC Reverse Current @TJ=25°C at rated DC blocking voltage @TJ=100°C	$I_R$	0.2	mA
		10.0	
Typical Junction Capacitance (Note1)	$C_J$	120	pF
Typical Thermal Resistance (Note2)	$R_{(JA)}$	55	°C/W
	$R_{(JC)}$	20	
Storage Temperature	$T_{STG}$	-55 to +150	°C
Operating Junction Temperature	$T_J$	-55 to +150	°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

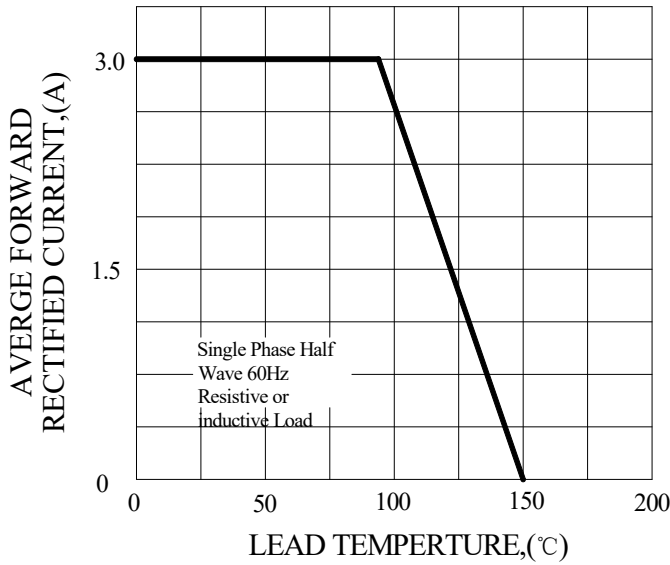


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

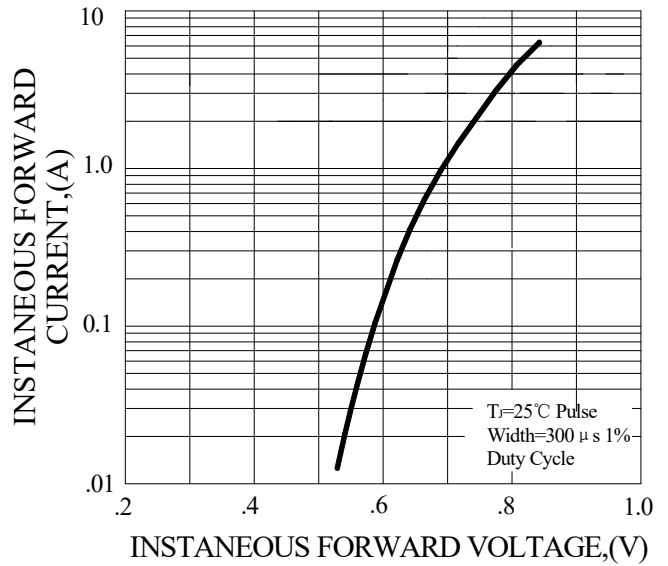


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

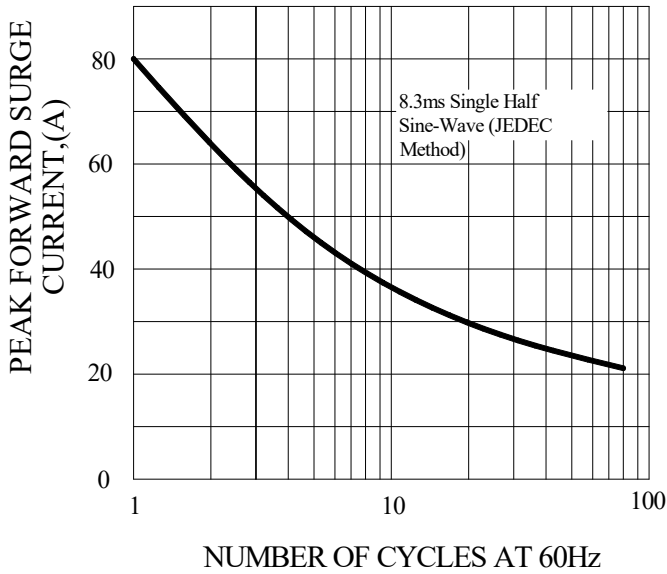
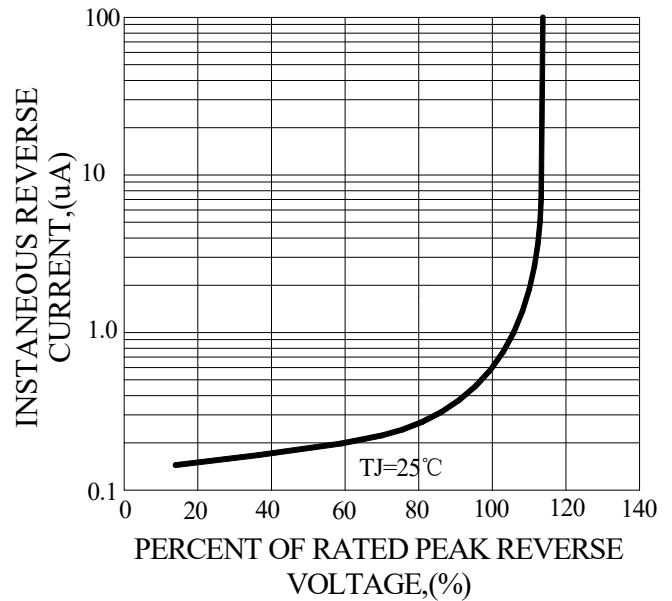
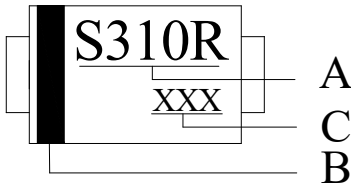


FIG.4-TYPICAL REVERSE CHARACTERISTICS



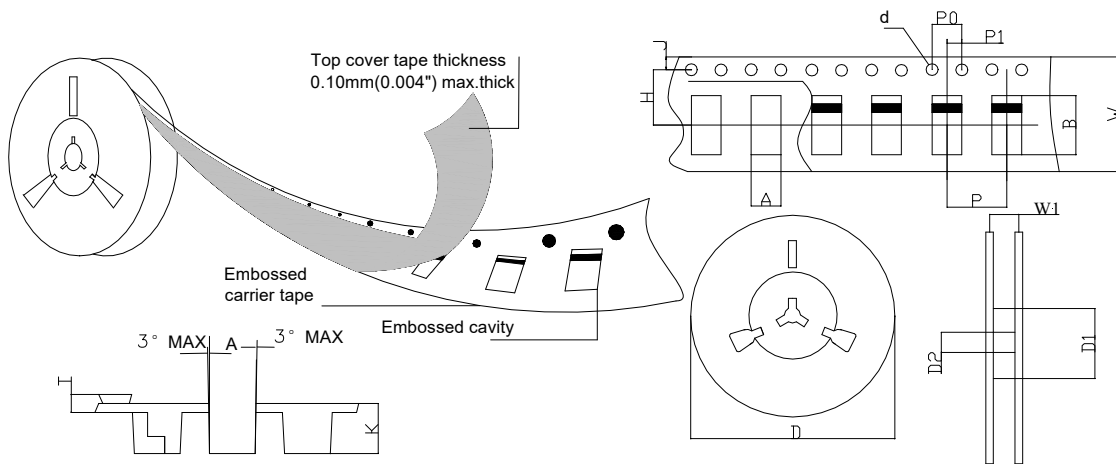
## Marking and packaging illustration

### 1、Marking



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

### 2、Packaging



SPECIFICATIONS mm(inch)		PACKAGE
SYMBOL	ITEM	SMF
	Carrier width	A
	Carrier length	B
	Sprocket hole	d
	Reel outer diameter	D
	Reel inner diameter	D1
	Feed hole diameter	D2
	Sprocket hole position	J
	Punch hole position	H
	Carrier depth	K
	Punch hole pitch	P
	Sprocket hole pitch	P0
	Embossment center	P1
	Overall tape thickness	T
	Tape width	W
	Reel width	W1