

**SS515**

**5.0AMPS. SCHOTTKY BARRIER RECTIFIERS**

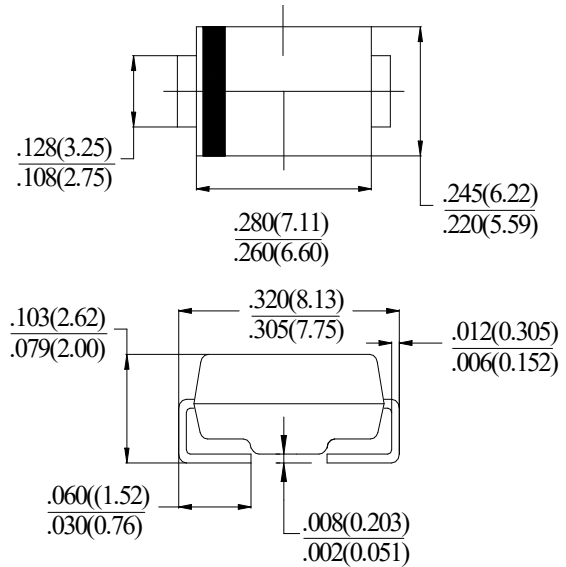
**FEATURE**

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

**MECHANICAL DATA**

- . Case: Molded plastic
- . Epoxy: UL94V-0 rate flame retardant
- . Lead: MIL-STD- 202E, Method 208 guaranteed
- . Polarity:Color band denotes cathode end
- . Mounting position: Any

**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<sub>C</sub>=25°C unless otherwise noted)

Parameter	Symbol	SS515	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 at T <sub>L</sub> ≤90°C	$I_{F(AV)}$	5	A
Non-repetitive forward surge current,8.3mS half sine-wave	$I_{FSM}$	120	A
Typical Junction Capacitance (Note 1)	$C_J$	112	pF
Operation Junction Temperature and Storage Temperature	$T_J, T_{STG}$	-55 to + 150	°C

**ELECTRICAL CHARACTERISTICS** (T<sub>C</sub>=25°C unless otherwise noted)

Parameter	Symbol	Min	Typ	Max	Units
Forward Voltage at I <sub>F</sub> =5A @ T <sub>J</sub> =25°C @ T <sub>J</sub> =125°C	$V_F$	-----	0.82 0.76	0.95 -----	V
Reverse current at rated DC blocking voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =125°C	$I_R$	-----	-----	0.1 20.0	mA

**THERMAL CHARACTERISTICS**(T<sub>C</sub>=25°C unless otherwise noted)

Parameter	Symbol	SS515	Units
Typical Thermal Resistance (Note2)	$R_{(JC)}$	20	°C/W

**Note:**1.Conditions:I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A

2.Measured on P.C.Board with 15.0mm\*15.0mm\*1.6mm Copper Pad Areas

**RATING AND CHARACTERISTIC CURVES (SS515)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

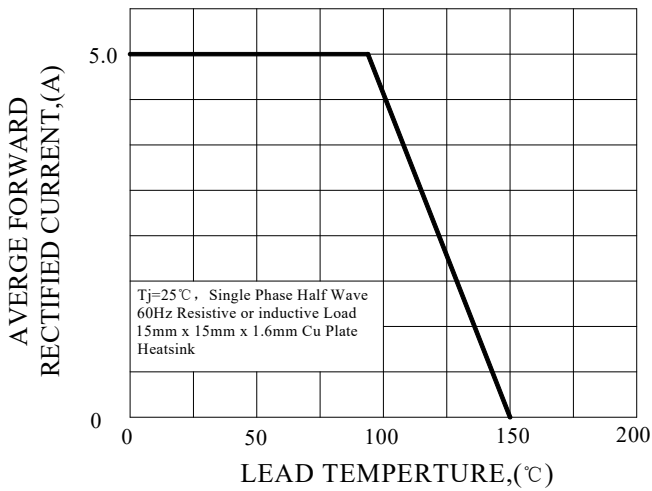


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

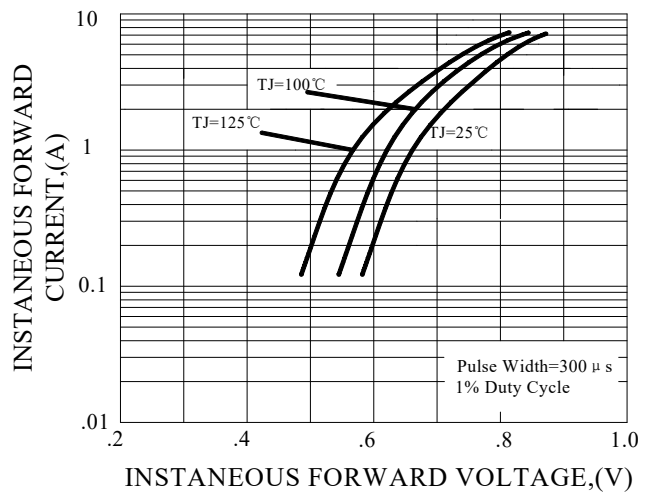


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

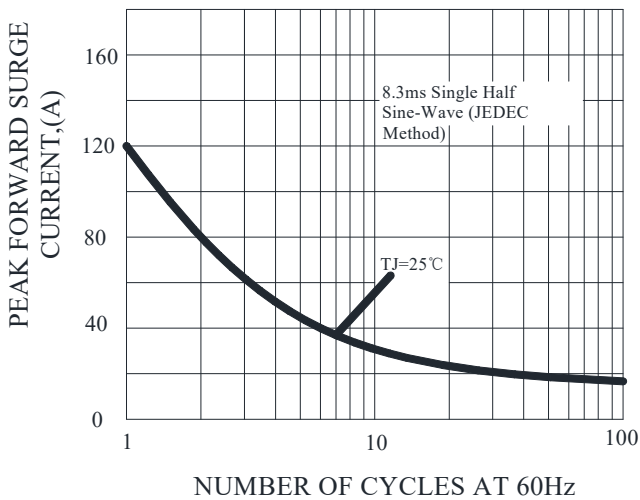


FIG.4-TYPICAL REVERSE CHARACTERISTICS

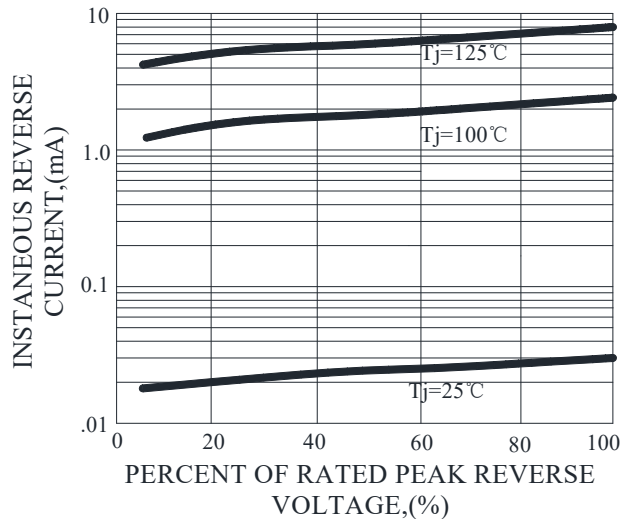


FIG.5-TYPICAL JUNCTION CAPAOTANCE

