

**SCHOTTKY BARRIER RECTIFIER**  
**VOLTAGE 200 Volts CURRENT 16.0 Ampere**

**FEATURES**

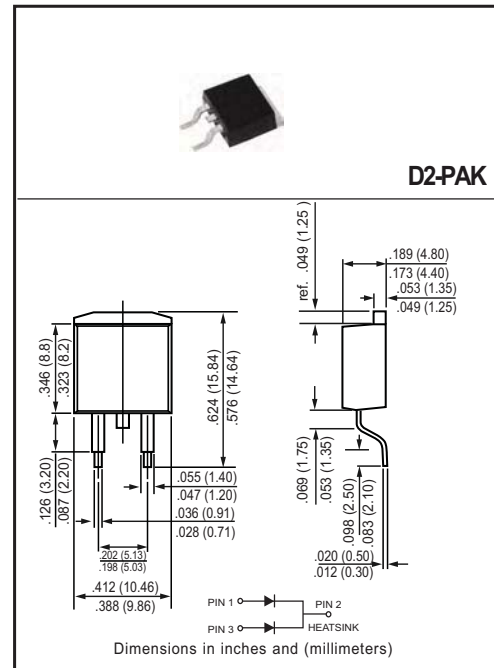
- \* Low switching noise
- \* Low forward voltage drop
- \* Low thermal resistance
- \* High current capability
- \* High switching capability
- \* High surge capability
- \* High reliability

**MECHANICAL DATA**

- \* Case: To-220 molded plastic
- \* Epoxy: Device has UL flammability classification 94V-0
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.



**MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)**

RATINGS	SYMBOL	SR16200CS	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	Volts
Maximum RMS Voltage	$V_{RMS}$	140	Volts
Maximum DC Blocking Voltage	$V_{DC}$	200	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	$I_O$	16.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	150	Amps
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	2.0	°C/W
	$R_{\theta JA}$	40	
Typical Junction Capacitance (Note 3)	$C_J$	500	pF
Operating Temperature Range	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-55 to + 150	°C

**ELECTRICAL CHARACTERISTICS (@TA=25 °C unless otherwise noted)**

CHARACTERISTICS	SYMBOL	SR16200CS	UNITS	
Maximum Instantaneous Forward Voltage at 8.0A DC	$V_F$	.85	Volts	
Maximum Average Reverse Current at Rated DC Blocking Voltage	$I_R$	@ $T_A = 25^\circ\text{C}$	0.2	mA
		@ $T_A = 100^\circ\text{C}$	2	mA

- NOTES : 1. Thermal Resistance : Heat-sink mounted.  
2. Suffix "A" = Common Anode.  
3. Measured at 1 MHz and applied reverse voltage of 4.0 volts.□  
4. "RoHS compliant"

## RATING AND CHARACTERISTICS CURVES ( SR16200CS )

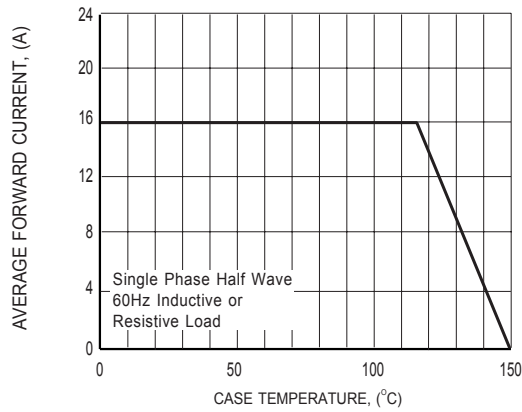


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

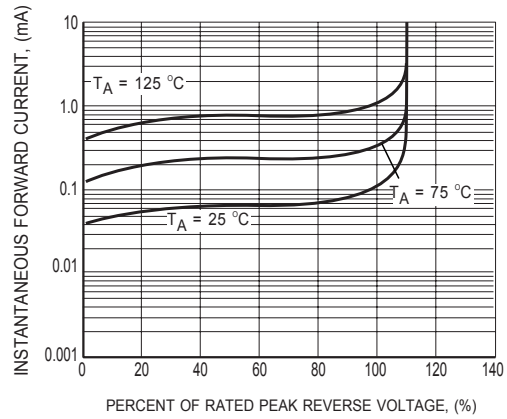


FIG.2 TYPICAL REVERSE CHARACTERISTICS

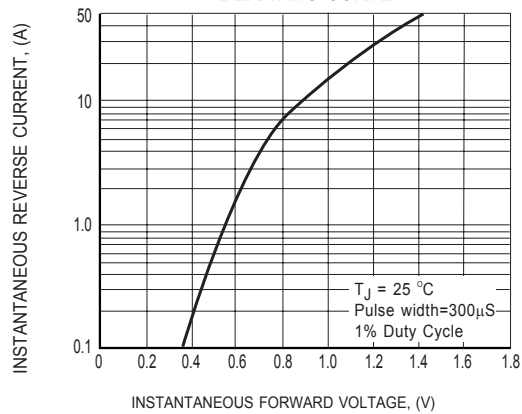


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

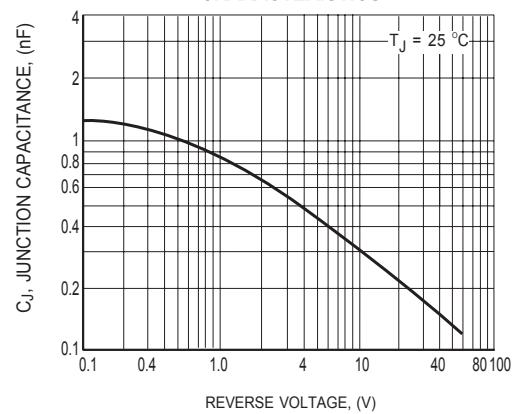


FIG.4 TYPICAL JUNCTION CAPACITANCE

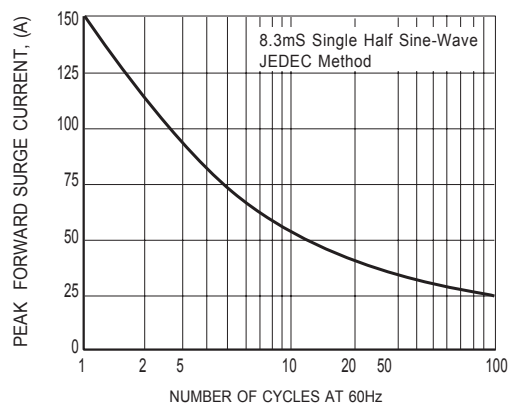


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

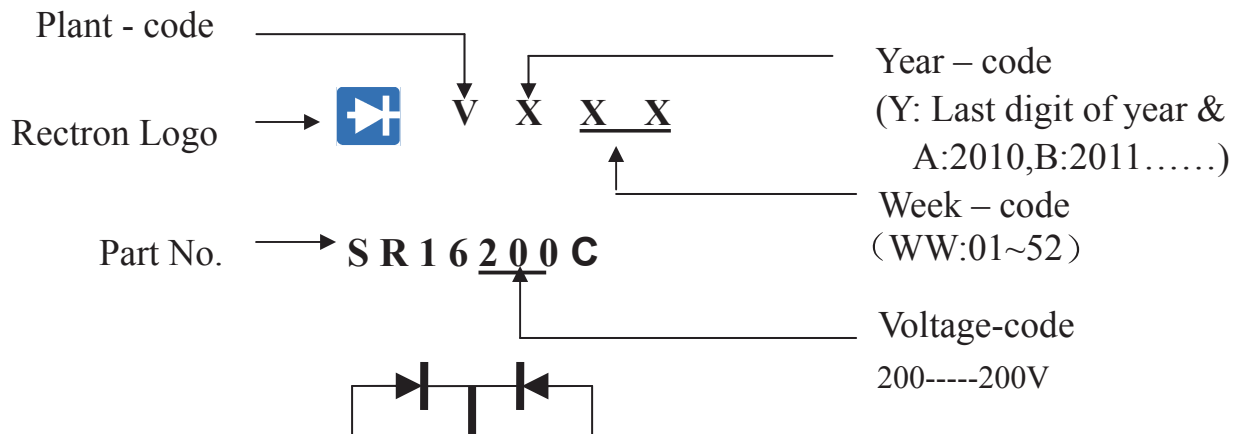


## Attachment information about SR16200CS

### 1. Internal Circuit



### 2. Marking on the body



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