RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

SR20H100CS

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 100 Volts CURRENT 20.0 Ampere

FEATURES

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

MECHANICAL DATA

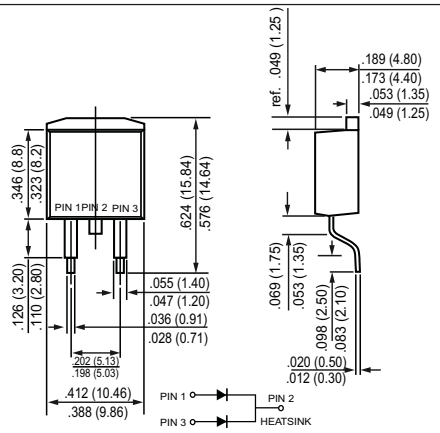
* Case: D2-PAK molded plastic
* Epoxy: Device has UL flammability classification 94V-O
* Lead: MIL-STD-202E method 208C guaranteed
* Mounting position: Any
* Weight: 2.24 grams

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%.



D2-PAK



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	SR20H100CS	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	Volts
Maximum RMS Voltage	V_{RMS}	70	Volts
Maximum DC Blocking Voltage	V_{DC}	100	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	I_O	20	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150	Amps
Typical Current Squarad Time	I^2t	93.37	A^2/Sec
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	-55 to + 175	°C
Storage Temperature Range	T_{STG}	-55 to + 175	°C

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

CHARACTERISTICS		SYMBOL	SR20H100CS	UNITS
Maximum Instantaneous Forward Voltage at 10.0A DC		V_F	.90	Volts
Maximum Average Reverse Current	@T_A = 25°C	I_R	10	uA
at Rated DC Blocking Voltage	@T_A = 150°C		1.0	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.

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RATING AND CHARACTERISTICS CURVES (SR20H100CS)

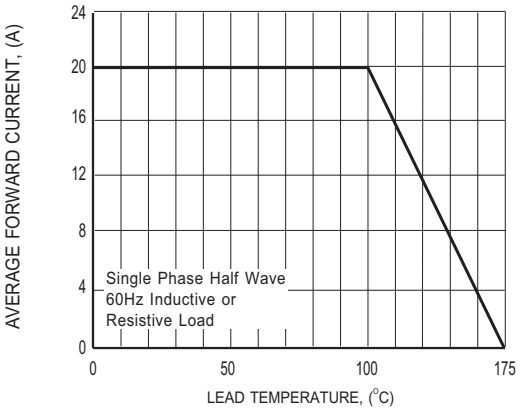


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

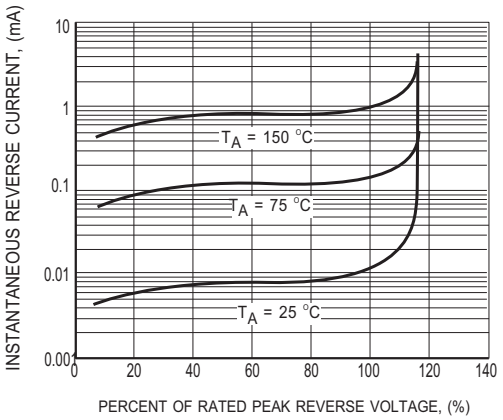


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

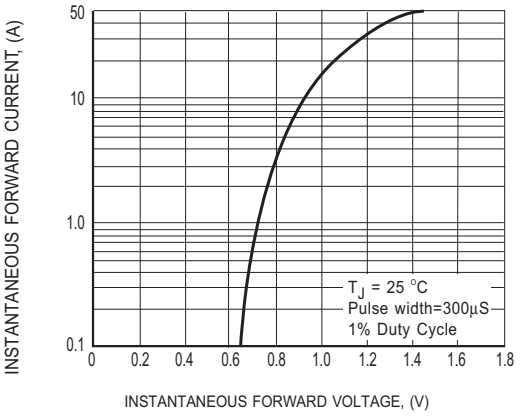


FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

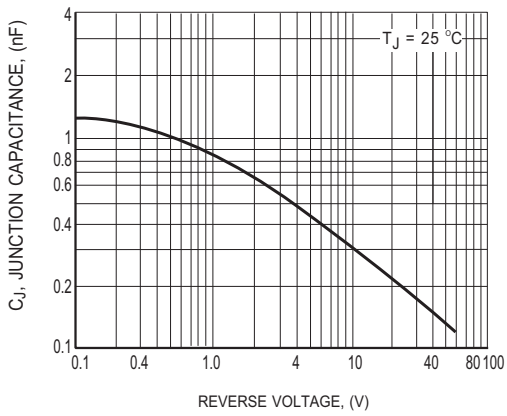


FIG.4 TYPICAL JUNCTION CAPACITANCE

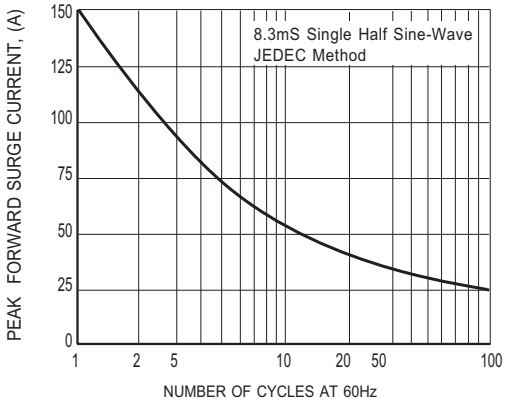


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

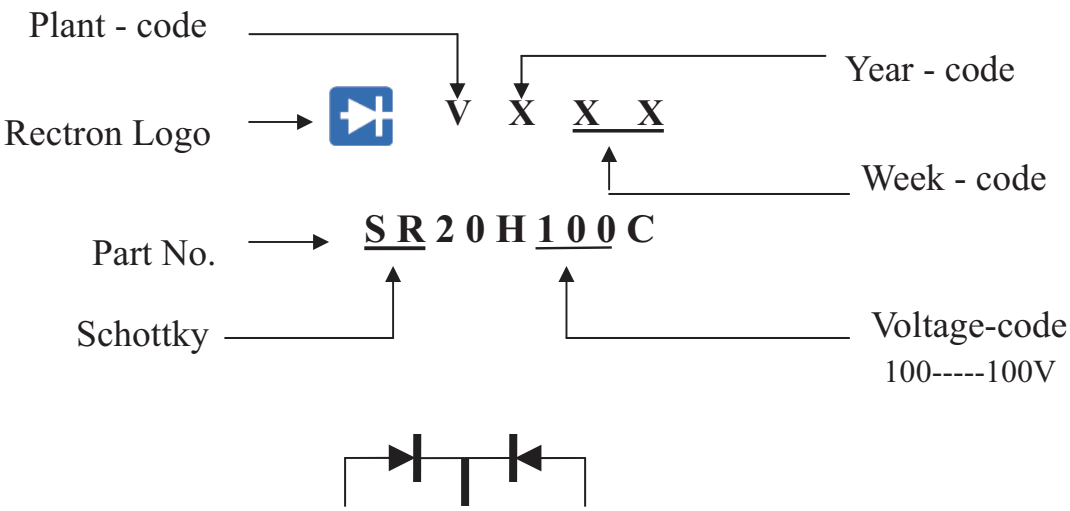
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Attachment information about SR20H100CS

1. Internal Circuit



2. Marking on the body



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

TUBE PACK

PACKAGE	PACKING CODE	EA PER BOX	INNER BOX SIZE (mm)	CARTON SIZE (mm)	EA PER CARTON	WEIGHT(Kg)
D2PAK	-C	2,500	340*340*30	360*340*370	25,000	13.43

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