RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

SR3050CS

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 50 Volts CURRENT 30 Amperes

FEATURES

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

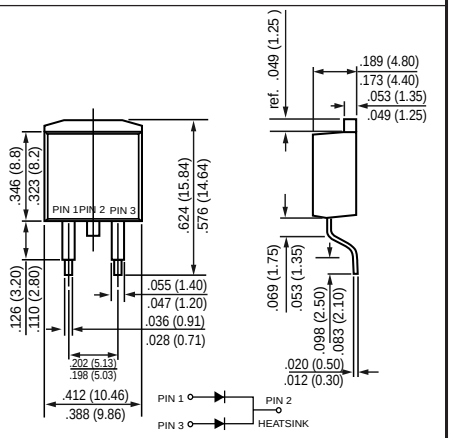
MECHANICAL DATA

* Case: D2-PAK molded plastic
* Epoxy: Device has UL flammability classification 94V-O
* Lead: MIL-STD-202E method 208C guaranteed
* Mounting position: Any
* Weight: 3.61 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.

D2-PAK



Dimensions in inches and (millimeters)

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

RATINGS	SYMBOL	SR3050CS	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	Volts
Maximum RMS Voltage	V_{RMS}	35	Volts
Maximum DC Blocking Voltage	V_{DC}	50	Volts
Maximum Average Forward Rectified Current at Derating Case Temperature	I_O	30	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	300	Amps
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	1.5	°C/W
	$R_{\theta JA}$	30	
Operating Temperature Range	T_J	175(Tj≤200°C in By pass Mode)	°C
Storage Temperature Range	T_{STG}	-55 to + 175	°C

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

CHARACTERISTICS		SYMBOL	SR3050CS	UNITS
Maximum Instantaneous Forward Voltage at 15.0A DC		V_F	.65	Volts
Maximum Average Reverse Current	@T_A = 25°C	I_R	1.0	mA
at Rated DC Blocking Voltage	@T_A = 100°C		10	mA

NOTES : 1. Thermal Resistance : Heat-sink mounted.
2. Suffix "A" = Common Anode.
3."Fully ROHS compliant","100% Sn plating (Pb-free)".
4. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

2010-04
REV:O

RATING AND CHARACTERISTICS CURVES (SR3050CS)

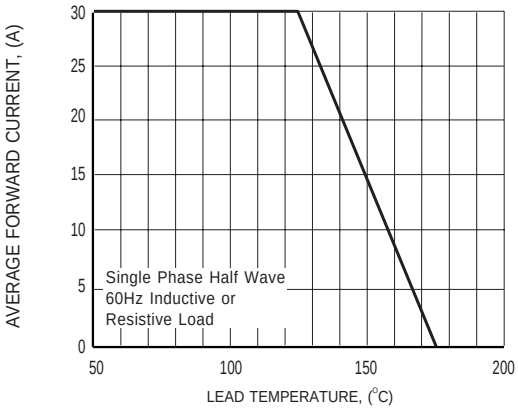


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

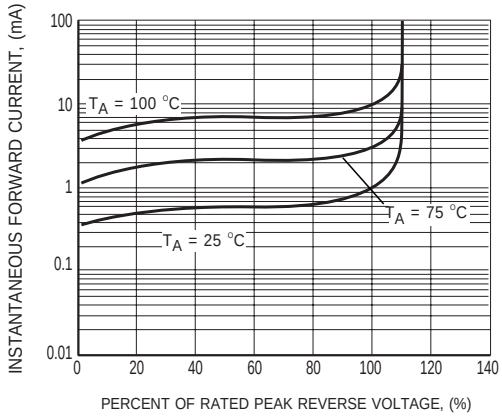


FIG.2 TYPICAL REVERSE CHARACTERISTICS

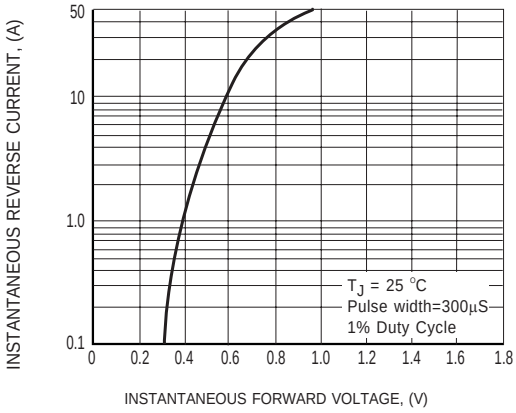


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

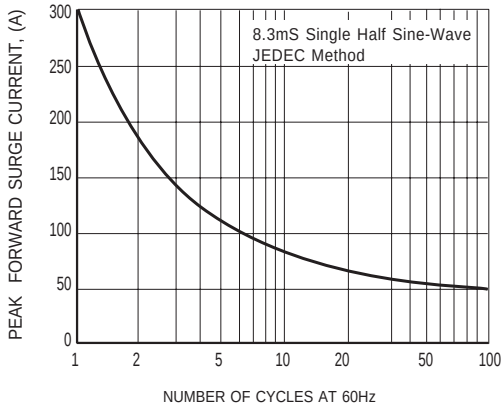


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

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