RECTRON
SEMICONDUCTOR
TECHNICAL SPECIFICATION

2SS20L

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 Volts CURRENT 2.0 Ampere

NEW RELEASE

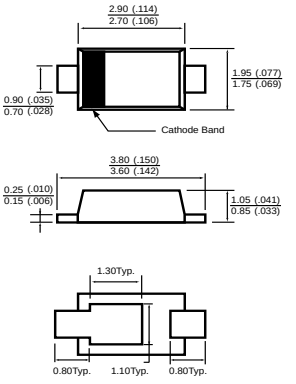
FEATURES

* Low power loss, high efficiency
* Low leakage
* Low forward voltage drop
* High current capability
* High speed switching
* High surge capabitity
* High reliability
* Guard ring construction on dic
* Anti-ESD

MECHANICAL DATA

* Epoxy: Device has UL flammability classification 94V-O
* Mounting position: Any
* Weight: 0.01 gram (Approx.)
* Flat lead frame

SOD-123L



Dimensions in inches and (millimeters)

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 (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	2SS20L	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	Volts
Maximum RMS Voltage	V_{RMS}	14	Volts
Maximum DC Blocking Voltage	V_{DC}	20	Volts
Maximum Average Forward Rectified Current @ T_T=120°C	I_O	2.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25	Amps
Thermal Resistance Junction to Ambient (Note 1)	$R\theta_{JA}$	58	°C/W
Thermal Resistance Junction to Soldering (Note 2)	$R\theta_{JS}$	9	°C/W
Operating Temperature Range	T_J	-55 to + 125	°C
Storage Temperature Range	T_{STG}	-55 to + 150	°C
Total Capacitance	C_T	75	pF

ELECTRICAL CHARACTERISTICS (At T_A = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	2SS20L	UNITS
Maximum Instantaneous Forward Voltage at	1.0A DC	V_F	.36	Volts
	2.0A DC		.42	
Maximum Average Reverse Current	10V @T_A = 25°C	I_R	0.4	mAmps
at Rated DC Blocking Voltage	20V @T_A = 25°C		1.0	mAmps

NOTES : 1. Part mounted on 50.8mm x 50.8mm FR4 board with 25.4mm x 25.4mm copper pad, 25% anode, 75% cathode.
2. $R\theta_{JS}$ calculated from the top center of the die straight down to the solder junction of cathode tab.
3. Measured at 1 MHz and applied reverse voltage of 10 volts.
4. “Fully ROHS compliant”, “100% Sn plating (Pb-free)”.
5.Available for IR reflow & wave soldering

RATING AND CHARACTERISTIC CURVES (2SS20L)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

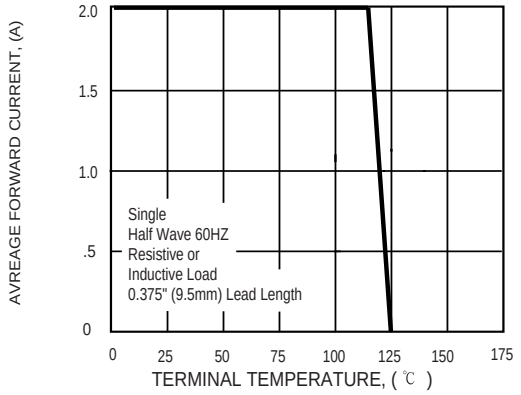


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARCTERISTICS

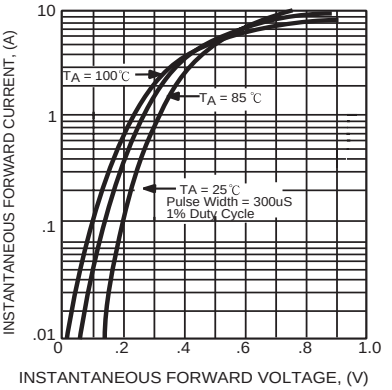


FIG. 5 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

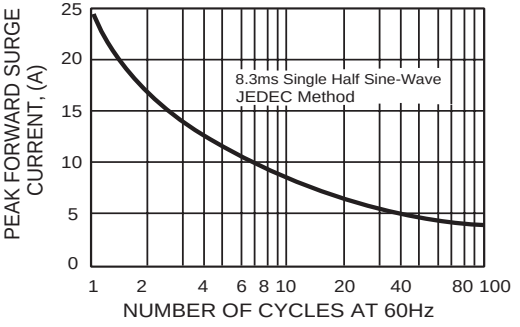


FIG. 4 - TYPICAL TOTAL CAPACITANCE

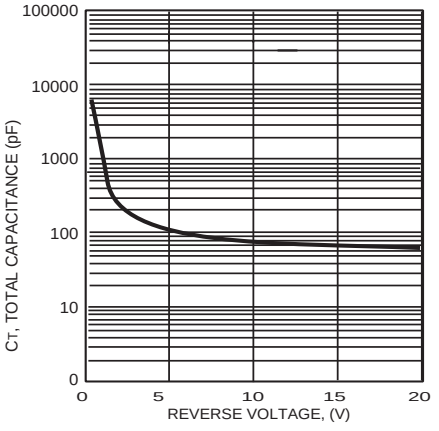


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS