RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

2SS20L THRU 2SS60L

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 60 Volts CURRENT 2.0 Amperes

NEW RELEASE

FEATURES

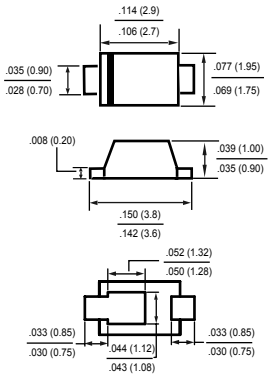
* Low power loss, high efficiency
* Low leakage
* Low forward voltage drop
* High current capability
* High speed switching
* High surge capabitity
* High reliability
* Guard ring construction on dic
* Anti-ESD

MECHANICAL DATA

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



SOD-123FL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

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

RATINGS	SYMBOL	2SS20L	2SS30L	2SS40L	2SS50L	2SS60L	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current @ T_A=75 °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}	50					Amps
Current Squared Time	I^2t	10.3					A^2/Sec
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	110					°C/W
	$R_{\theta JL}$	3					
Operating Temperature Range	T_J	150					°C
Storage Temperature Range	T_{STG}	-55 to + 150					°C
Total Capacitance (Note 1)	C_T	75					pF

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

CHARACTERISTICS		SYMBOL	2SS20L	2SS30L	2SS40L	2SS50L	2SS60L	UNITS
Maximum Instantaneous Forward Voltage at 2.0A DC		V_F	0.55			0.70		Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@T_A = 25°C	I_R	0.2					mAmps
	@T_A = 100°C		2					mAmps

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4 Volts.
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
3. Thermal Resistance: Mounted on PCB.

2009-09
REV: A

RATING AND CHARACTERISTICS CURVES (2SS20L THRU 2SS60L)

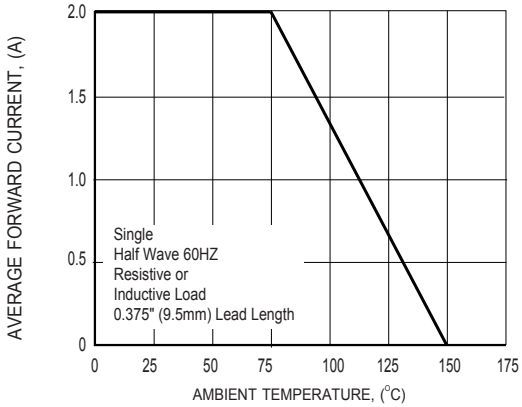


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

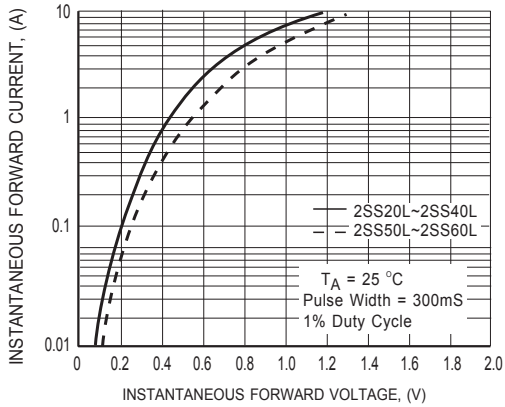


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

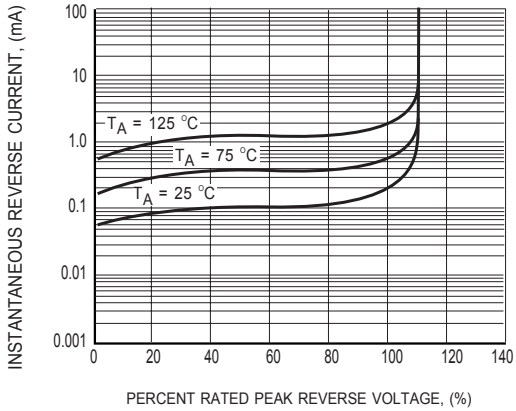


FIG.3 TYPICAL REVERSE CHARACTERISTICS

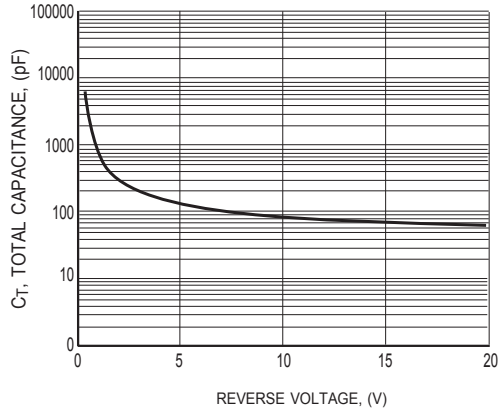


FIG.4 TYPICAL TOTAL CAPACITANCE

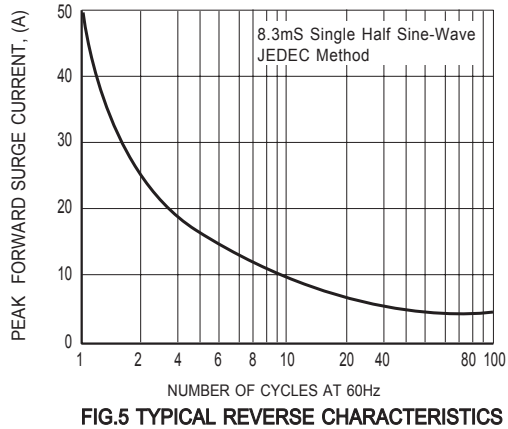
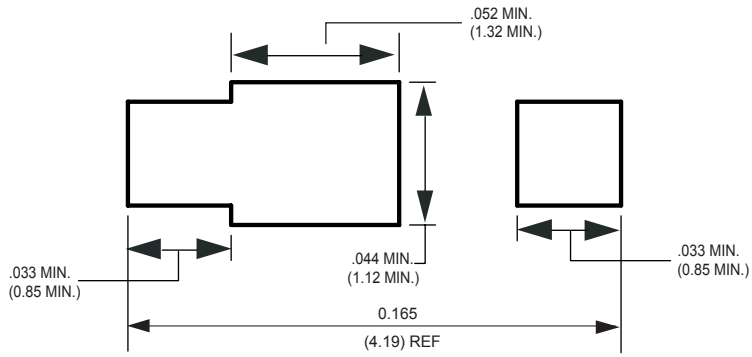


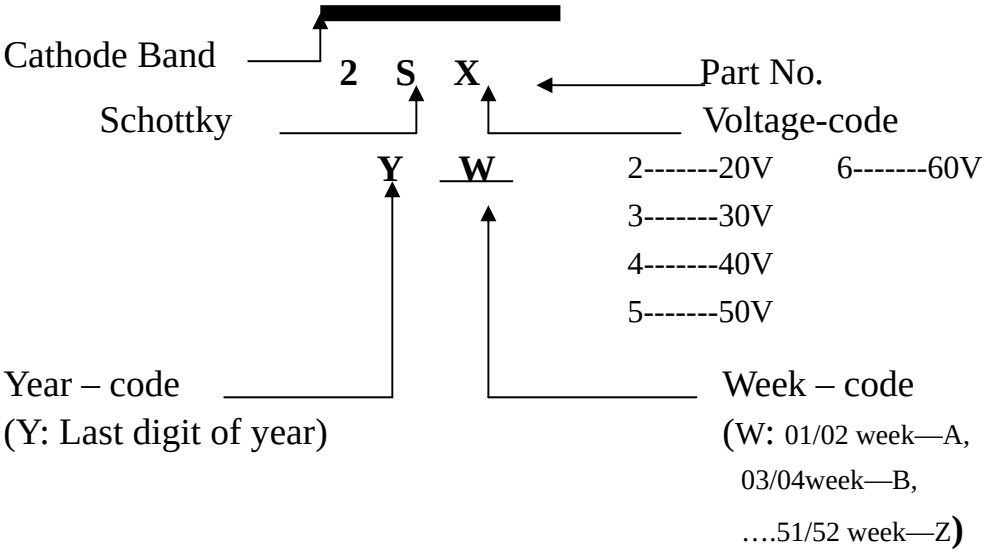
FIG.5 TYPICAL REVERSE CHARACTERISTICS

Mounting Pad Layout



Dimensions in inches and (millimeters)

Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	COMPONENT SPACE(mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SOD-123FL	-W	2,500	---	---	178	390*205*310	100,000	5.804

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