RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

2SSL20 THRU 2SSL40

LOW Vf SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 to 40 Volts CURRENT 2.0 Ampere

FEATURES

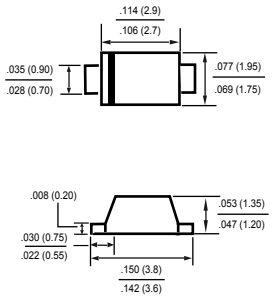
* Low power loss, high efficiency
* Low leakage
* Low forward voltage
* High current capability
* High speed switching
* High surge capabitity
* High reliability

MECHANICAL DATA

* Epoxy: Device has UL flammability classification 94V-O
* Mounting position: Any
* Weight: 0.016 gram



SOD-123F



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 (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	2SSL20	2SSL30	2SSL40	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	Volts
Maximum DC Blocking Voltage	V_{DC}	20	40	40	Volts
Maximum Average Forward Rectified Current .375" (9.5mm) lead length at 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}	25			Amps
Typical Current Square Time	I^2T	2.5			A^2S
Typical Junction Capacitance (Note1)	C_J	110			pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	110			°C/W
	$R_{\theta JL}$	30			
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	2SSL20	2SSL30	2SSL40	UNITS
Maximum Instantaneous Forward Voltage at 2.0A DC		V_F	.42			Volts
Maximum Average Reverse Current	@T_A = 25°C	I_R	1.0			mAmps
at Rated DC Blocking Voltage	@T_A = 100°C		10			mAmps

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
2. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
3. Thermal resistance: Mounted on PCB.

2009-09
REV: A

RATING AND CHARACTERISTICS CURVES (2SSL20 THRU 2SSL40)

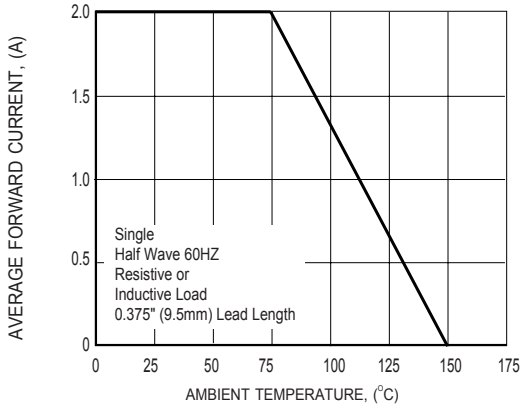


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

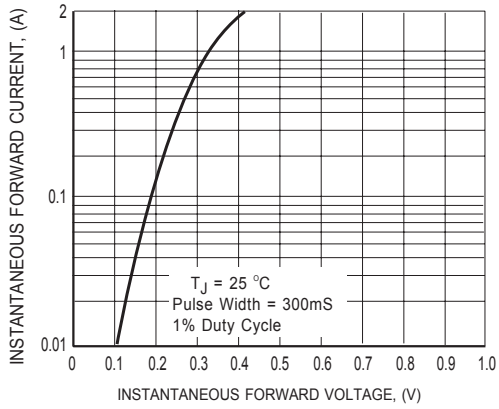


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

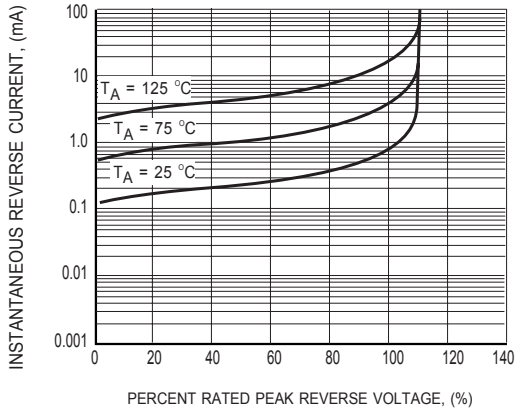


FIG.3 TYPICAL REVERSE CHARACTERISTICS

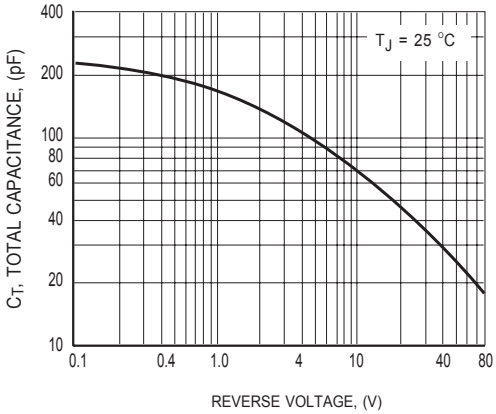


FIG.4 TYPICAL JUNCTION CAPACITANCE

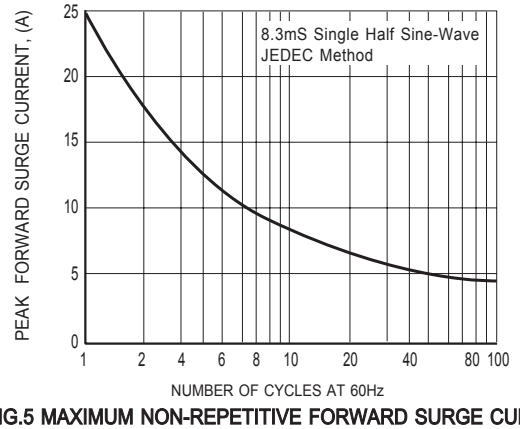
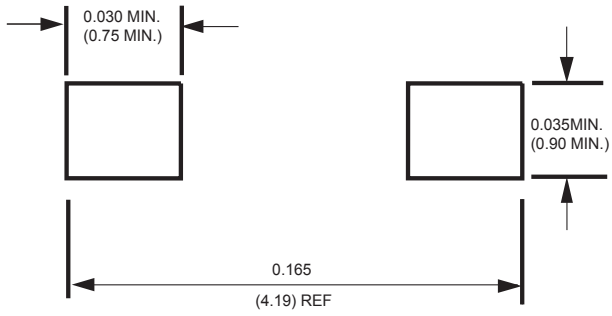


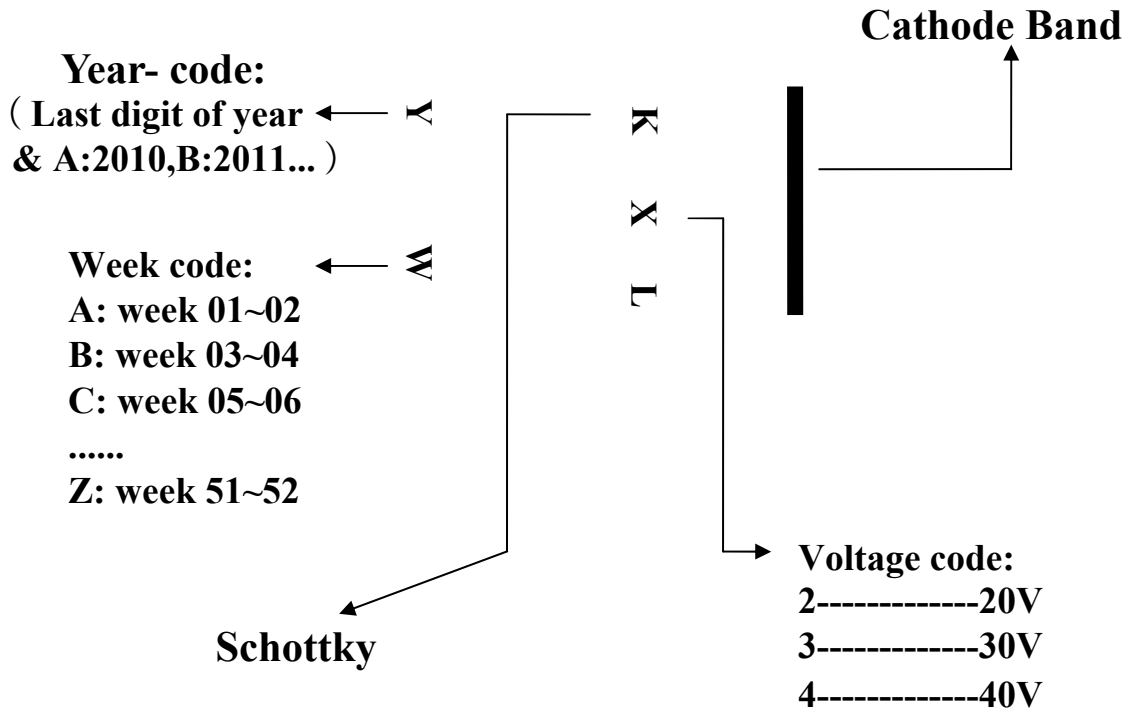
FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

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-123F	-W	2,500	---	---	178	390*205*310	100,000	5.804

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