RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

2SS100V

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 100Volts CURRENT 2.0 Amperes

FEATURES

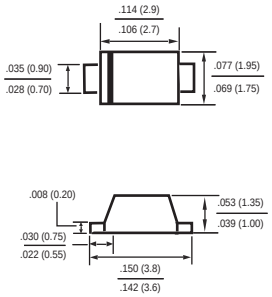
* Low power loss, high efficiency
* Low leakage
* Low forward voltage drop
* High current capability
* High speed switching
* High surge capability
* High reliability
* Guard ring construction on dic
* Anti-ESD
* P/N suffix V means AEC-Q101 qualified, e.g:2SS100V
* P/N suffix V means Halogen-free

MECHANICAL DATA

* Epoxy: Device has UL flammability classification 94V-O
* Mounting position: Any
*Weight: 0.018 gram(Approx.)
* Flat lead frame



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 (@ T_A=25 °C unless otherwise noted)

RATINGS	SYMBOL	2SS100V	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 @ 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}	60	Amps
Current Squared Time	I^2t	14.94	A^2S
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	110	°C/W
	$R_{\theta JL}$	30	
Operating Temperature Range	T_J	-55 to + 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	2SS100V	UNITS
Maximum Instantaneous Forward Voltage at 2.0A DC		V_F	0.80	Volts
Maximum Average Reverse Current	@T_A = 25°C	I_R	0.1	mAmps
at Rated DC Blocking Voltage	@T_A = 150°C		12	mAmps

NOTES : 1. Measured at 1 MHz and applied reverse voltage of 4 Volts.
2. ROHS compliant
3. Thermal Resistance: Mounted on PCB.

2020-11
REV:O

RATING AND CHARACTERISTICS CURVES (2SS100V)

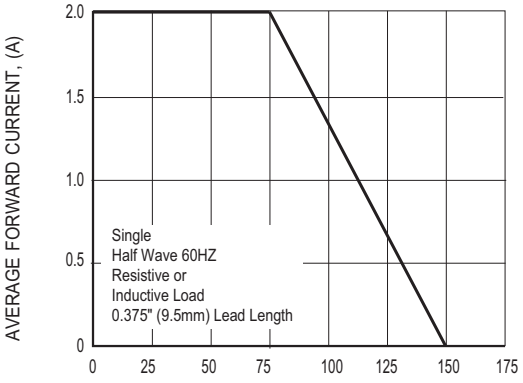


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

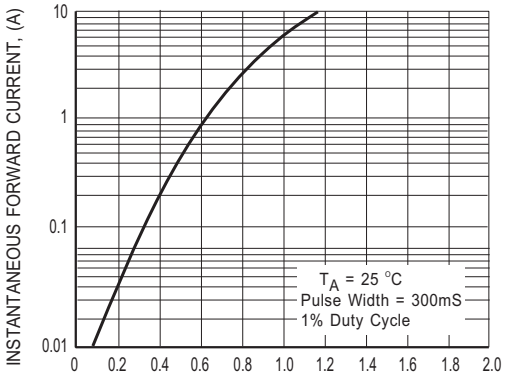


FIG.2 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

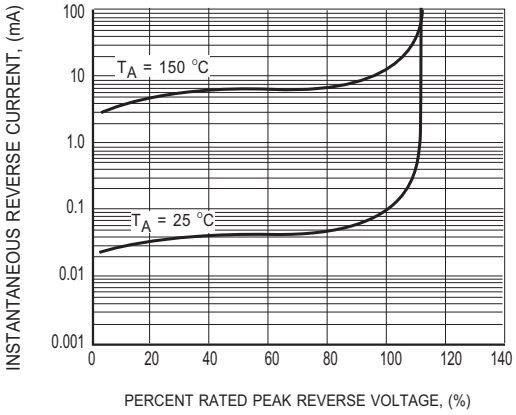


FIG.3 MAXIMUM REVERSE CHARACTERISTICS

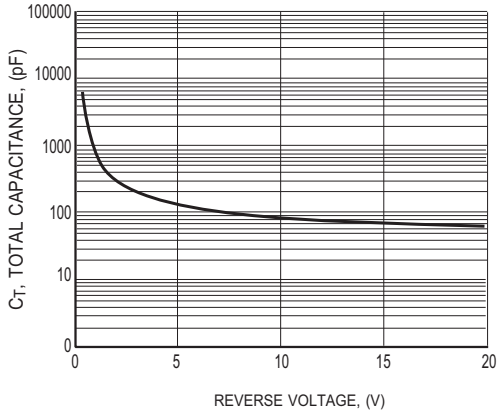


FIG.4 TYPICAL TOTAL CAPACITANCE

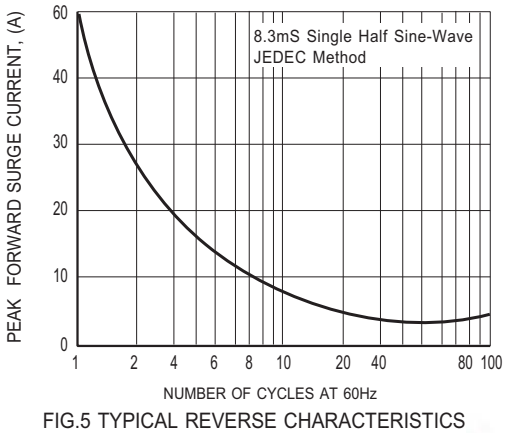
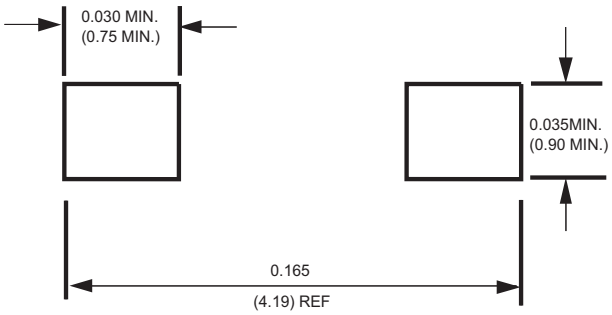


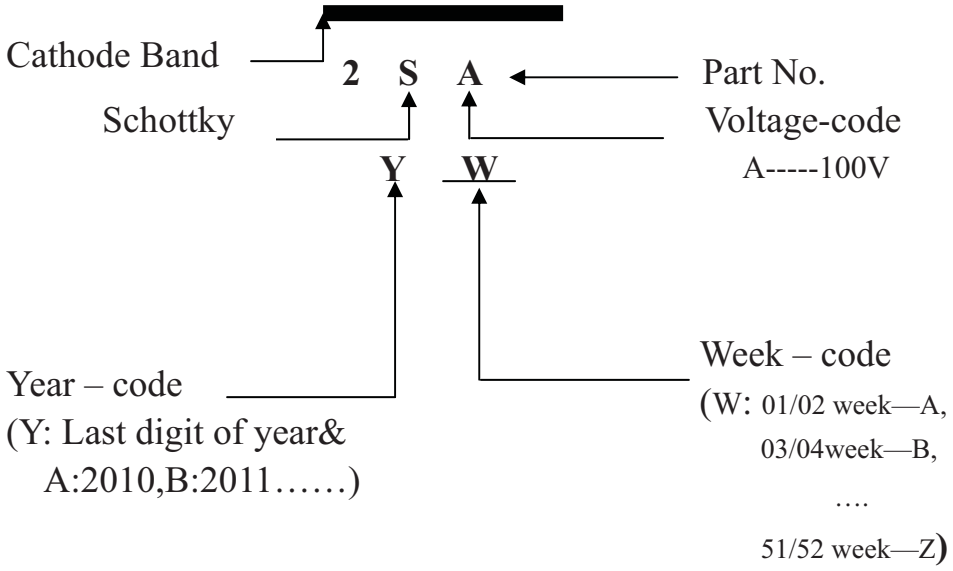
FIG.5 TYPICAL REVERSE CHARACTERISTICS

Mounting Pad Layout



Dimensions in inches and (millimeters)

Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SOD-123F/ SOD-123FL	-W	3,000	15,000	---	---	178	390*205*31	120,000	6.964

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