

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 200 Volts CURRENT 1.0 Ampere

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 dice
- * Anti-ESD
- * P/N suffix V means AEC-Q101 qualified, e.g:SS200LV
- * P/N suffix V means Halogen-free

MECHANICAL DATA

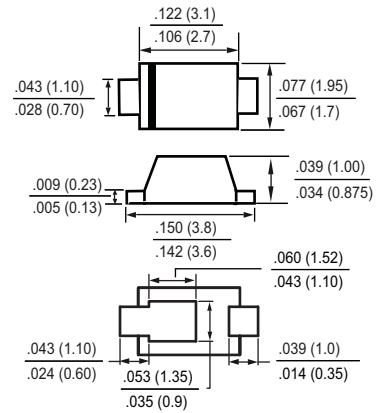
- * Epoxy: Device has UL flammability classification 94V-O
- * Mounting position: Any
- * Weight: 0. 01 gram (Approx.)
- * Flat lead frame

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



SOD-123FL



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

RATINGS	SYMBOL	SS200LV	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	200	Volts
Maximum RMS Voltage	V _{RMS}	140	Volts
Maximum DC Blocking Voltage	V _{DC}	200	Volts
Maximum Average Forward Rectified Current @ T _A =100°C	I _O	1.0	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 ² T	1.66	A ² S
Typical Thermal Resistance (Note 3)	R _{θJA}	110	°C/W
	R _{θJL}	30	
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(@TA=25 °C unless otherwise noted)

CHARACTERISTICS	SYMBOL	SS200LV	UNITS
Maximum Instantaneous Forward Voltage at 1.0A DC	V _F	0.9	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@T _A = 25°C	0.2	mA
	@T _A = 100°C	2	

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

RATING AND CHARACTERISTICS CURVES (SS200LV)

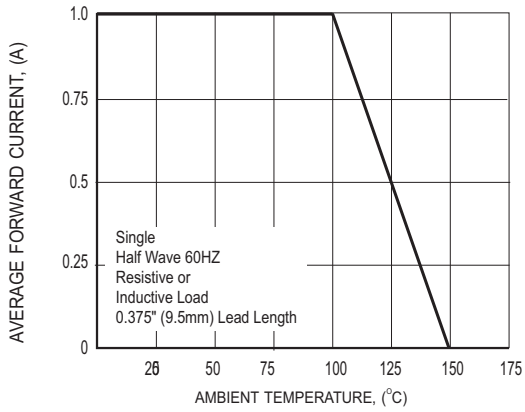


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

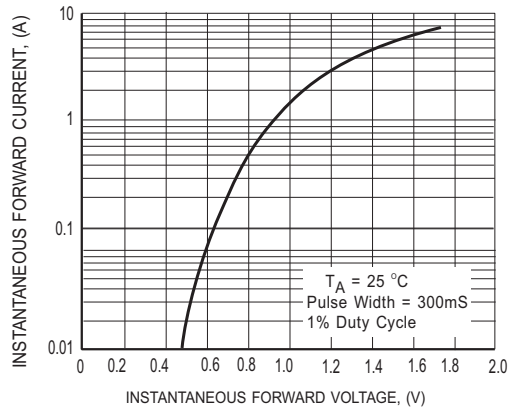


FIG.2 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

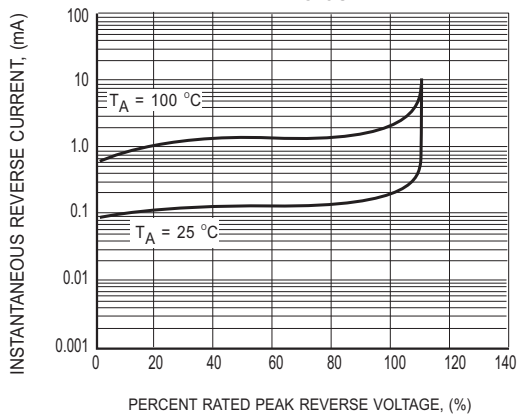


FIG.3 MAXIMUM REVERSE CHARACTERISTICS

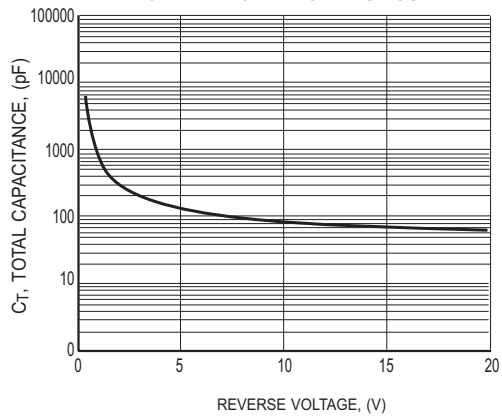


FIG.4 TYPICAL TOTAL CAPACITANCE

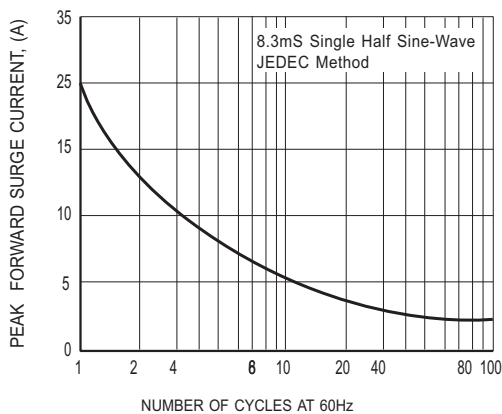


FIG.5 TYPICAL REVERSE CHARACTERISTICS

Marking Description

Year- code: ← Y
(Y: Last digit of year &
A:2010,B:2011.....)

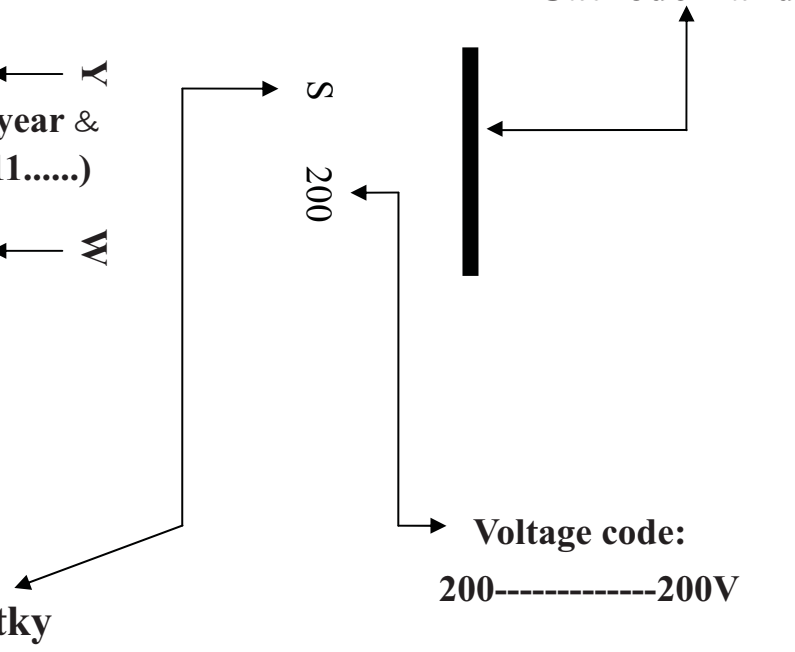
Week code: ← W
A: week 01~02
B: week 03~04
C: week 05~06
.....
Z: week 51~52

Schottky

S
200

Voltage code:
200-----200V

Cathode Band



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

REEL TAPING SPECIFICATIONS FOR SURFACE MOUNT DEVICES-SOD-123FL

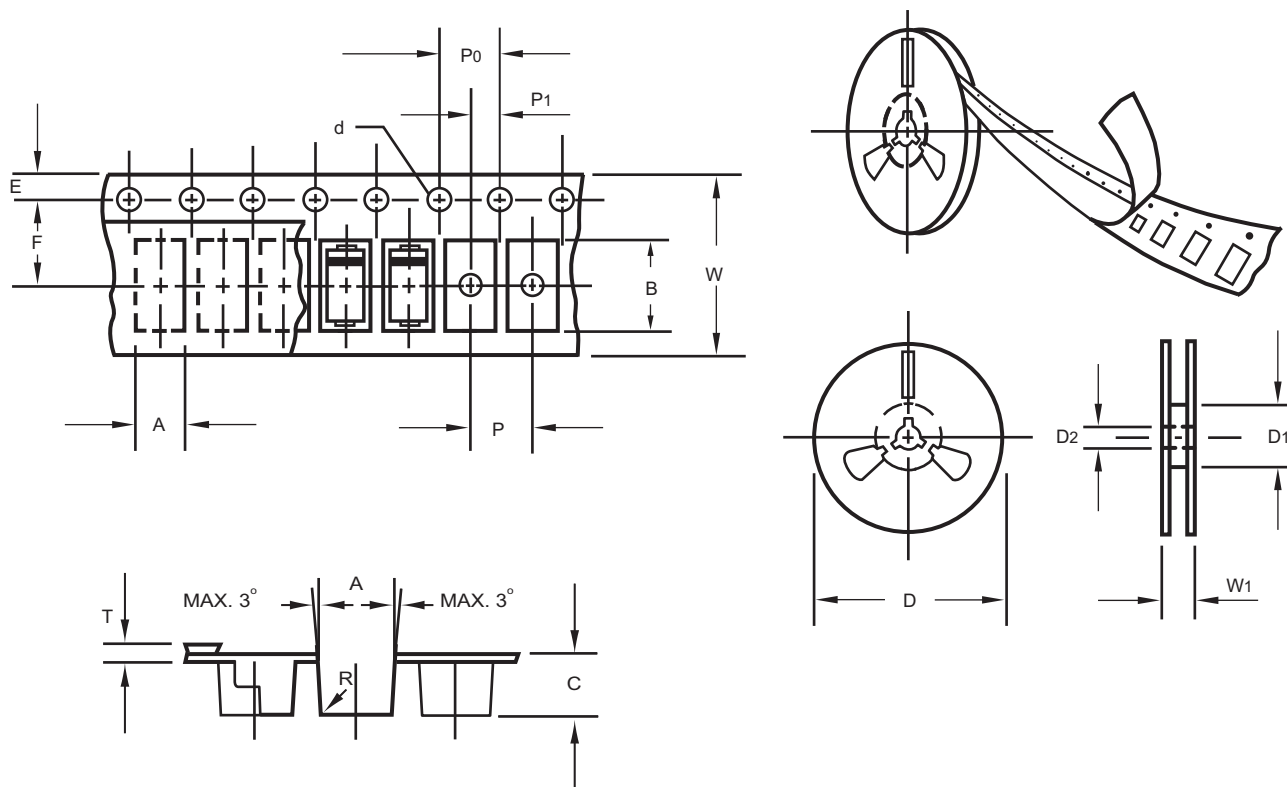


Fig.: Configuration of SOD-123FL TAPING

ITEM	SYMBOL	SPECIFICATIONS (mm)	SPECIFICATIONS (inch)
Carrier width	A	2.05 ± 0.05	0.081 ± 0.002
Carrier length	B	3.85 ± 0.1	0.152 ± 0.004
Carrier depth	C	1.15 ± 0.1	0.045 ± 0.004
Sprocket hole	d	1.55 ± 0.05	0.061 ± 0.002
Reel outside diameter	D	178 ± 2.0	7.01 ± 0.039
Reel inner diameter	D1	60 Min.	2.363 Min.
Feed hole diameter	D2	13.0 ± 0.5	0.512 ± 0.020
Stroket hole position	E	1.75 ± 0.1	0.069 ± 0.004
Punch hole position	F	3.50 ± 0.05	0.138 ± 0.002
Punch hole pitch	P	4.00 ± 0.1	0.158 ± 0.004
Sprocket hole pitch	P0	4.00 ± 0.1	0.158 ± 0.004
Embossment center	P1	2.00 ± 0.05	0.079 ± 0.002
Total tape thickness	T	0.3 ± 0.05	0.012 ± 0.002
Tape width	W	8.00 ± 0.3	0.315 ± 0.012
Reel width	W1	11.4 ± 0.5	0.449 ± 0.020

Note: Devices are packed in accordance with EIA standard RS-481-D and specification given above.

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