Schottky Barrier Rectifier

Reverse Voltage - 200 V

Forward Current - 1 A

Pinning

1.Cathode	2.Anode



SOD-123FL

Marking Code	
DSH120W	L120

FEATURES

- Low Power Loss, High Efficiency
- For surface mounted applications
- Ideal for automated placement
- High forward surge current capability
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering guaranteed 260°C/10seconds at terminals

APPLICATION

For use in low voltage high frequency inverters, freewheeling, DC/DC converters,and polarity protection applications.

Absolute Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Parameter	Symbols	DSH120W	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS voltage	V_{RMS}	140	V
Maximum DC Blocking Voltage	V_{DC}	200	V
Maximum Average Forward Rectified Current T_C=125 °C	$I_{(AV)}$	1.0	A
Maximum Instantaneous Forward Voltage at 1.0 A	V_F	0.95	V
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load (JEDEC method)	I_{FSM}	35	A
Typical junction capacitance (Note1）	C_J	16	pF
Maximum Instantaneous Reverse Current at Rated DC Reverse Voltage T_A = 25°C T_A = 125°C T_A = 150°C	I_R	10 10 50	μA mA mA
Minimum reverse breakdown voltage I_R=0.2mA	V_R	200	V
Typical Thermal Resistance (Note2）	$R_{\theta JA}$ $R_{\theta JC}$	70 18	°C/W
Operating Junction Temperature Range	T_J	-55 ~ +175	°C
Storage Temperature Range	I_{STG}	-55 ~ +150	°C

（1）Measured at 1 MHz and applied reverse voltage of 4 V D.C.

（2）Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B,with 0,3" x0,3" (8.0 mm x 8,0 mm) copper pad areas

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

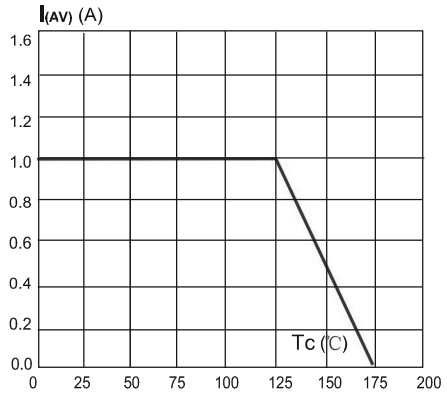


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

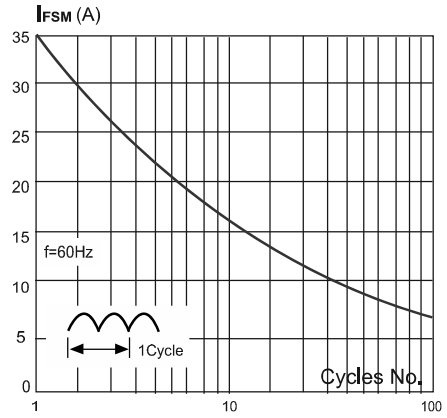


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

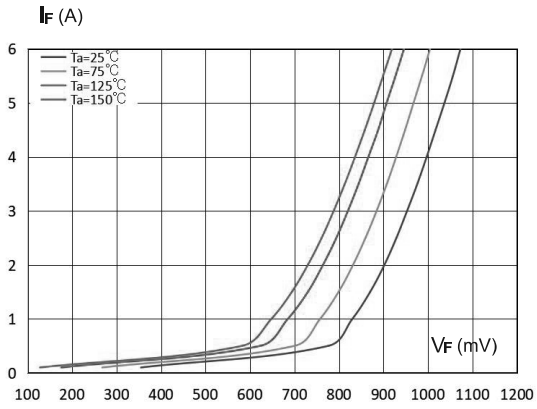
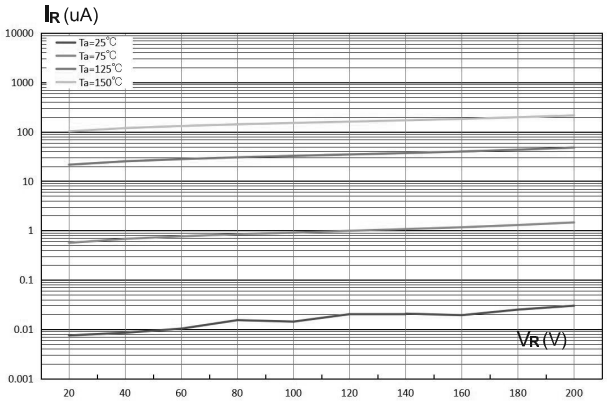
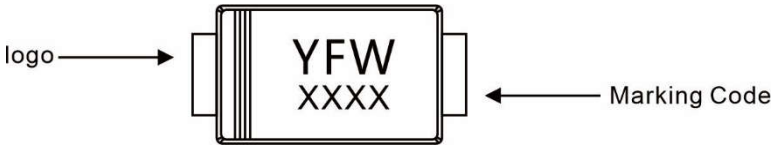


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



Marking Diagram

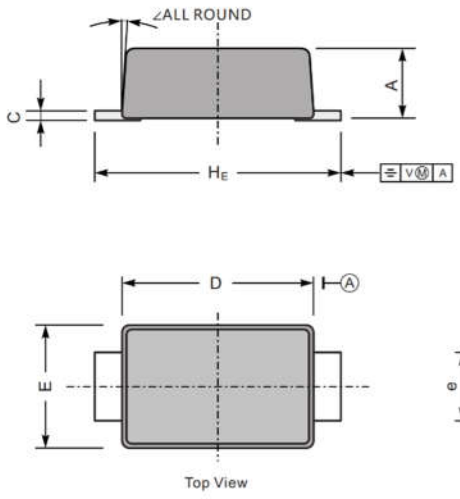


Ordering information

Package	Packing Description	Packing Quantity
SOD-123FL	Tape/Reel,7"reel	3000PCS/Reel 120000PCS/Carton

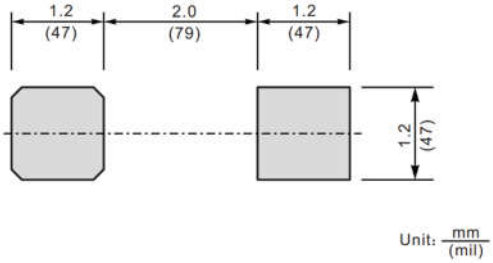
Package Dimensions

SOD-123FL



Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.3	35	43
C	0.12	0.20	4.7	7.9
D	2.6	2.9	102	114
E	1.7	1.9	67	75
e	0.8	1.1	31	43
g	0.7	0.9	28	35
HE	3.5	3.8	138	150
∠	7°			

The recommended mounting pad size



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