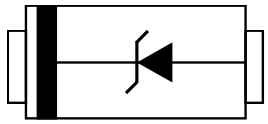
Description

Surface Mount Schottky Barrier Rectifier Rectifiers

Reverse Voltage 20 to 200 V

Forward Current 2.0 A



SOD123-FL

Maximum Ratings and Electrical characteristics per line@25℃(unless otherwise specified)
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %

Parameter	Symbols	PDS 22W	PDS 24W	PDS 26W	PDS 28W	PDS 210W	PDS 212W	PDS 215W	PDS 220W	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	V_{RMS}	14	28	42	56	80	100	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2.0								A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50				40				A
Maximum Instantaneous Forward Voltage at	V_F	0.55		0.70		0.85		0.90		V
Maximum DC Reverse Current Ta = 25 ℃ at Rated DC Blocking Voltage Ta =125 ℃	I_R	0.5 10		0.3 5						mA
Typical Junction Capacitance 1)	C_j	220		80						pF
Typical Thermal Resistance 2)	$R_{\theta JA}$	115								℃/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55~+150								℃

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

2）Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, P.C.B. mounted

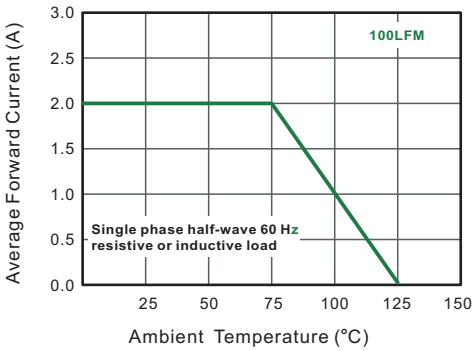


Fig.1 Forward Current Derating Curve

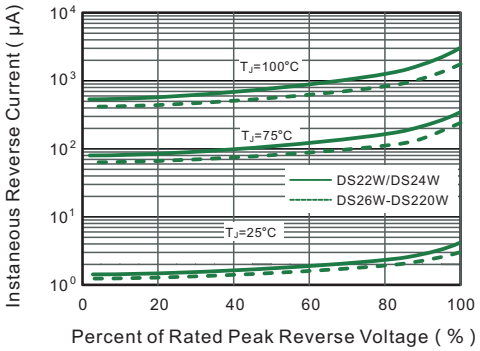


Fig.2 Typical Reverse Characteristics

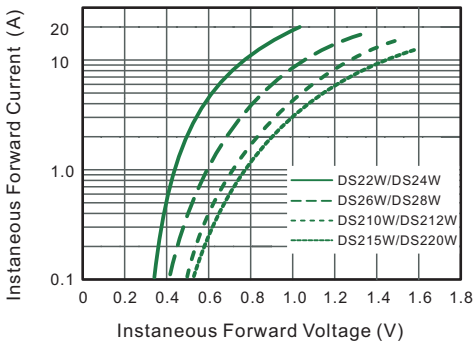


Fig.3 Typical Forward Characteristic

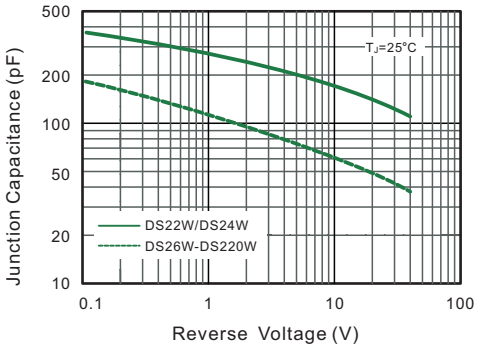


Fig.4 Typical Junction Capacitance

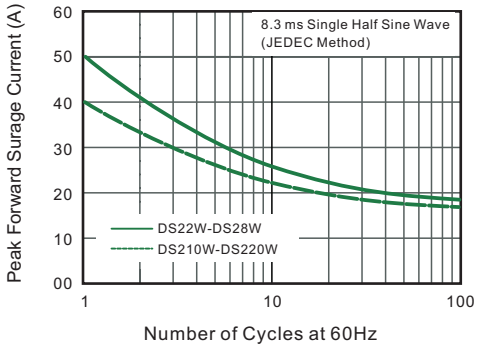
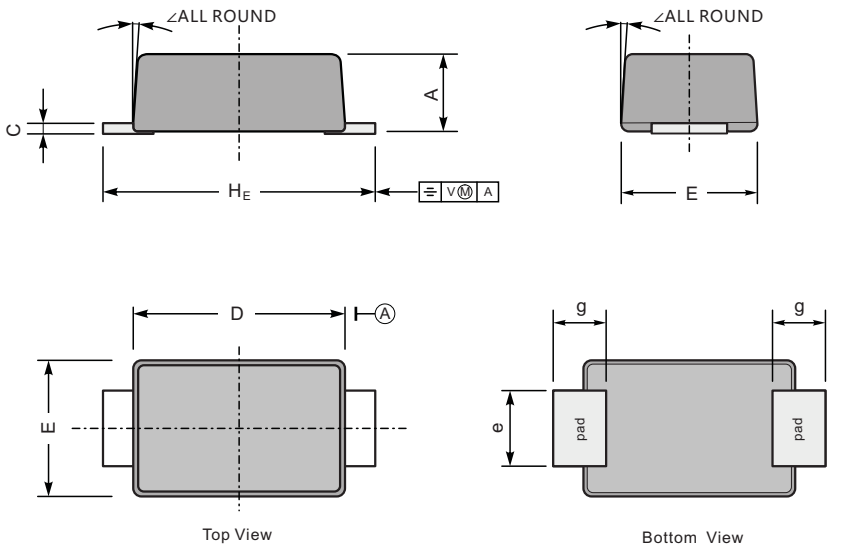


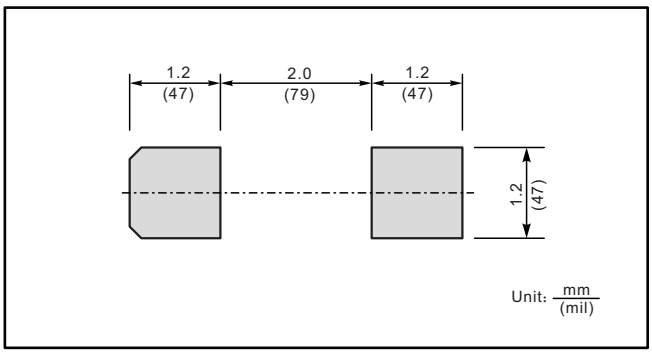
Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

Product dimension (SOD-123FL)

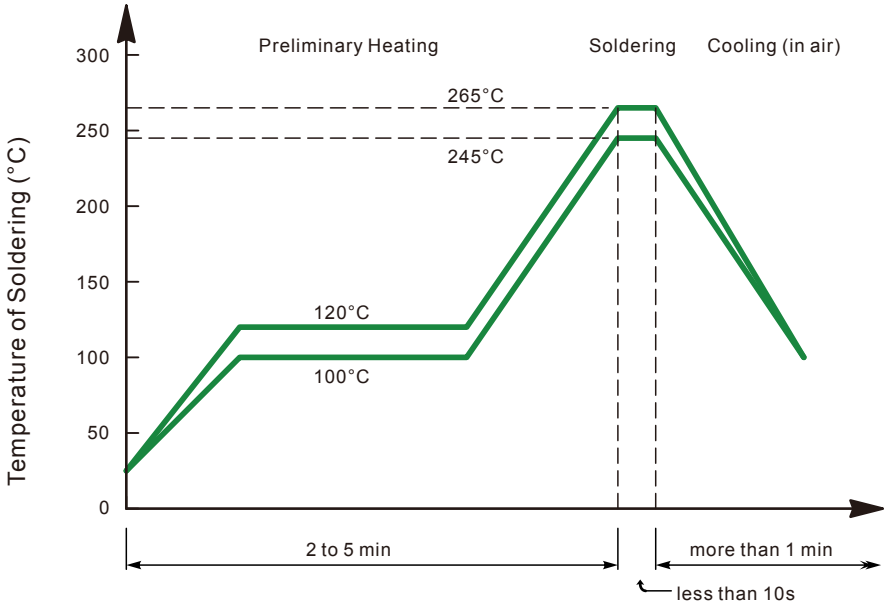


UNIT		A	C	D	E	e	g	H_E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

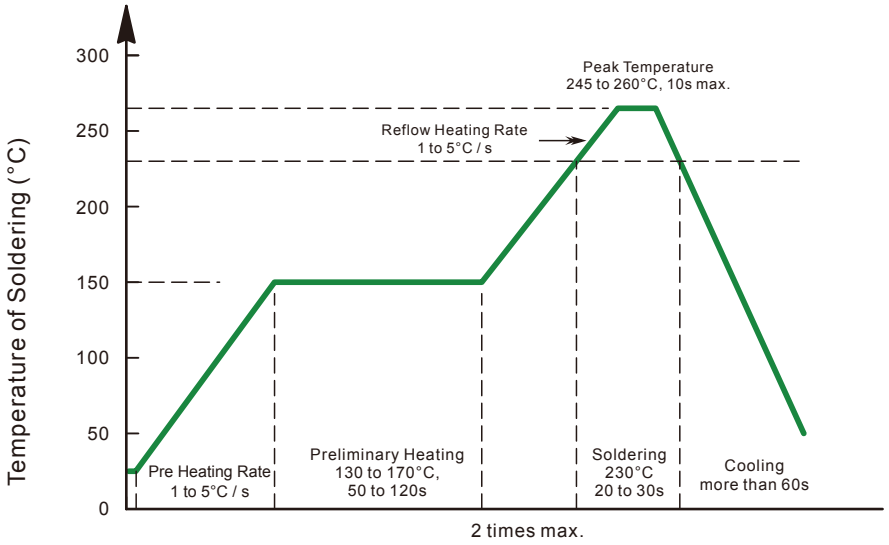
The recommended mounting pad size



• **Recommended condition of flow soldering**



• **Recommended condition of reflow soldering**



Recommended peak temperature is over 245 °C. If peak temperature is below 245 °C, you may adjust the following parameters; time length of peak temperature (longer), time length of soldering (longer), thickness of solder paste (thicker)

• **Condition of hand soldering**
Temperature: 370°C
Time: 3s max.
Times: one time

• **Remark:**
Lead free solder paste (96.5Sn/3.0Ag/0.5Cu)

Website: http://www.prisemi.com
For additional information, please contact your local Sales Representative.