



Surface Mount Schottky Barrier Rectifiers
Reverse Voltage 20 to 200 Volts Forward Current 2.0 Amperes

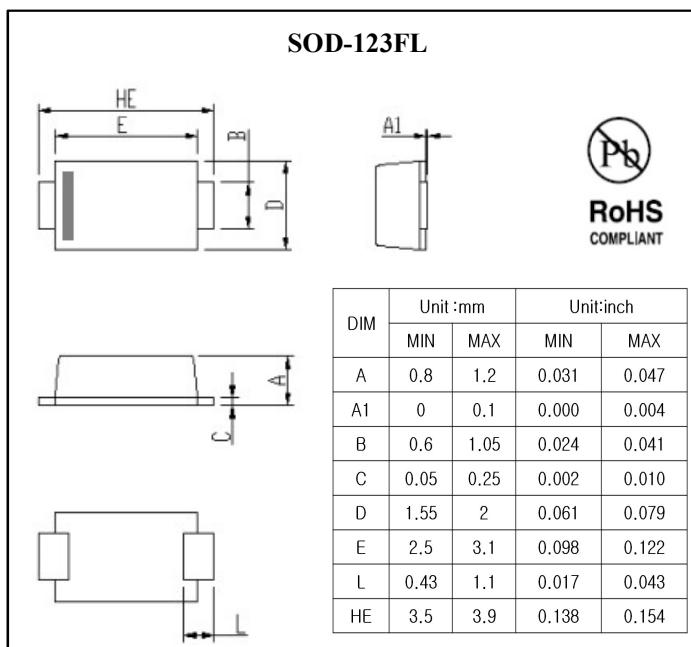
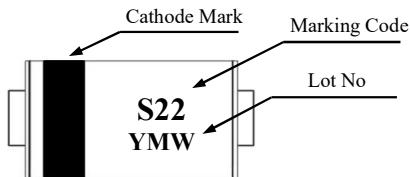
Features

- For surface mounted application
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Mechanical Data

- Case : SOD-123FL
- Terminals : Solderable per MIL-STD-750, Method 2026
- Weight : 0.015gram

Marking



Maximum Ratings & Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified

Single phase half wave 60 Hz, resistive or inductive load

For capacitive load, derate current by 20%

Parameter	Symbol	DS 22W	DS 24W	DS 26W	DS 28W	DS 210W	DS 212W	DS 215W	DS 220W	Unit	Remark										
Marking Code		S22	S24	S26	S28	S210	S212	S215	S220												
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	70	84	105	140	V											
Maximum DC Blocking Voltage	V _{DC}	20	40	60	80	100	120	150	200	V											
Maximum Average Forward Rectified Current at T _L (See Fig.1)	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							A												
Maximum Instantaneous Forward Voltage at 2.0A	V _F	0.55		0.70		0.85		0.95		V	Ta=25°C										
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	0.5			0.3			mA		Ta=25°C											
		5.0			3.0			mA		Ta=100°C											
Typical Junction Capacitance	C _j	220		80					pF	Note 1											
Typical Thermal Resistance	R _{th(j-a)}	85							°C /W	Note 2											
Operation Junction Temperature Range	T _J	-55 to +150							°C												
Storage Temperature Range	T _{STG}	-55 to +150							°C												

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

Note 2. P.C.B. mounted with 2.0" x 2.0" (5mm x 5mm) Copper Pad Areas.



Ratings and Characteristics Curves (Ta=25°C unless otherwise noted)

Fig.1 Forward Current Derating Curve

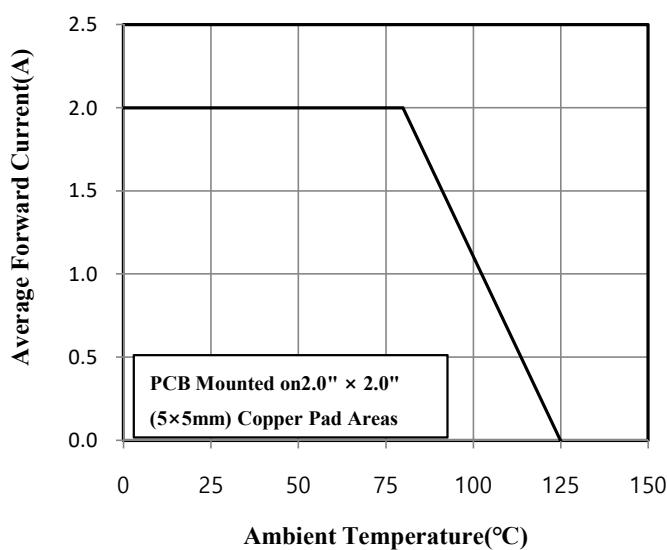


Fig.3 Typical Instantaneous Forward Characteristics

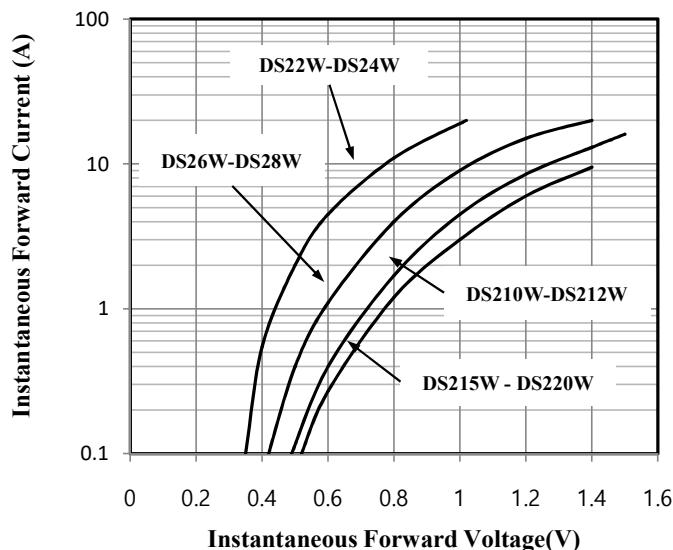


Fig.5 Typical Reverse Characteristics

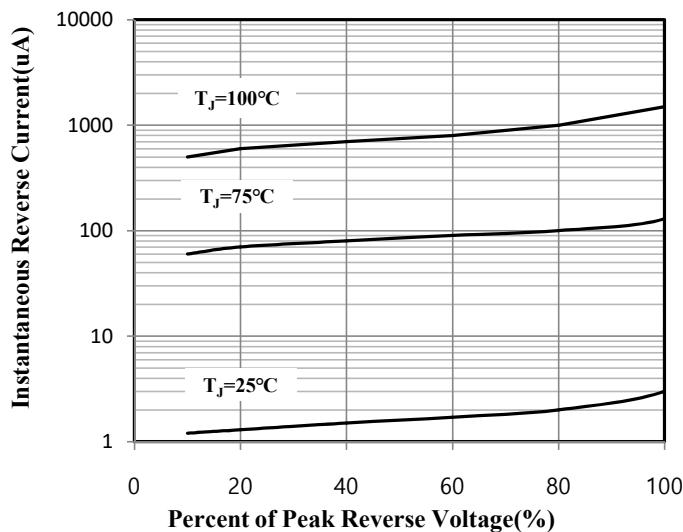


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

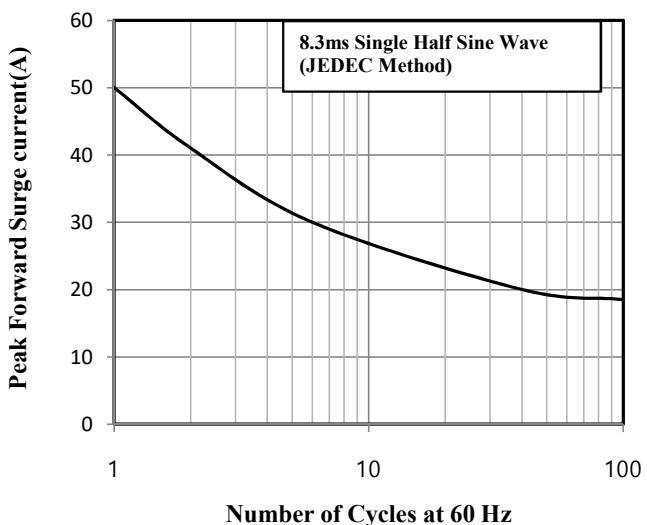


Fig.4 Typical Junction Capacitance

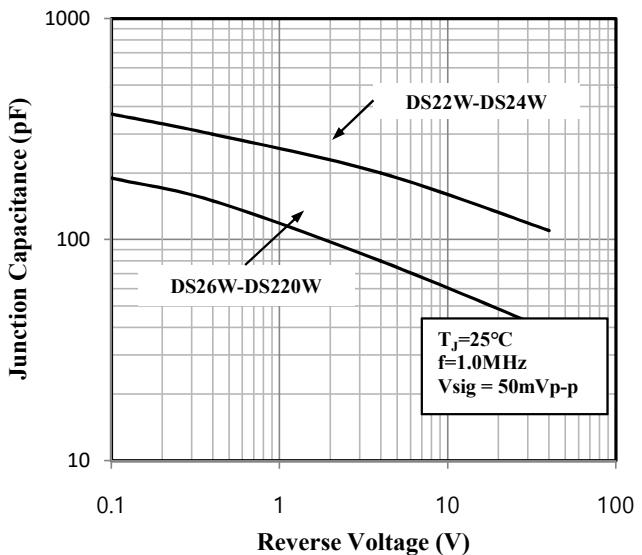


Fig.6 Typical Transient Thermal Impedance

