

Surface Mount Schottky Barrier Rectifier

FEATURES:

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

Circuit Diagram & Pin Configuration:



SOD-123FL

Marking

Type number	Marking code
DSS22	K22
DSS24	K24
DSS26	K26
DSS28	K28
DSS210	K210
DSS212	K212
DSS215	K215
DSS220	K220

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	DSS22	DSS24	DSS26	DSS28	DSS210	DSS212	DSS215	DSS220	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	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	I _{F(AV)}	2.0								A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	50				40				A
Max Instantaneous Forward Voltage at 2 A	V _F	0.55		0.70		0.85		0.95		V
Maximum DC Reverse Current T _a = 25°C at Rated DC Reverse Voltage T _a =100°C	I _R	0.5 5			0.3 3					mA
Typical Junction Capacitance ⁽¹⁾	C _j	220		80						pF
Typical Thermal Resistance ⁽²⁾	R _{θJA}	85								°C/W
Operating Junction Temperature Range	T _j	-55 ~ +150								°C
Storage Temperature Range	T _{stg}	-55 ~ +150								°C

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

(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Fig.1 Forward Current Derating Curve

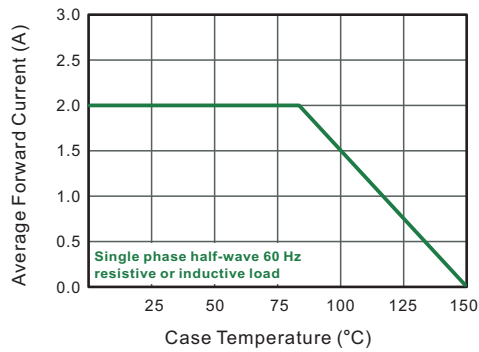


Fig.2 Typical Reverse Characteristics

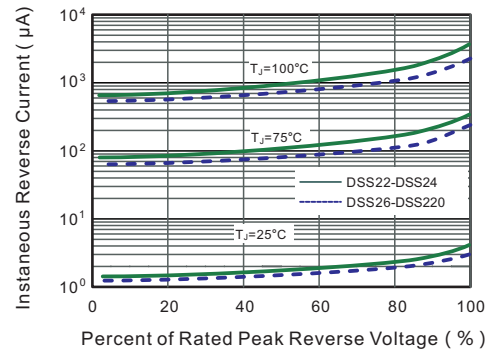


Fig.3 Typical Forward Characteristic

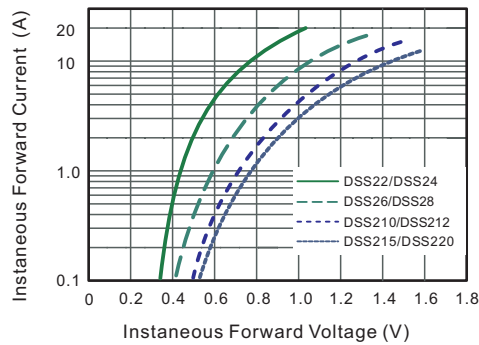


Fig.4 Typical Junction Capacitance

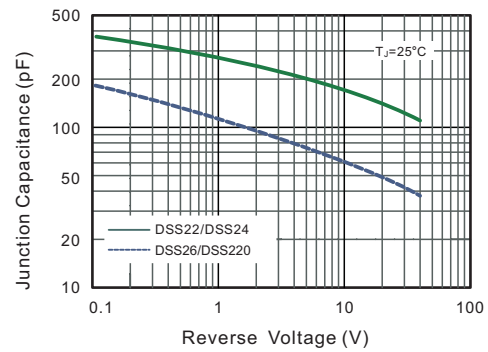


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

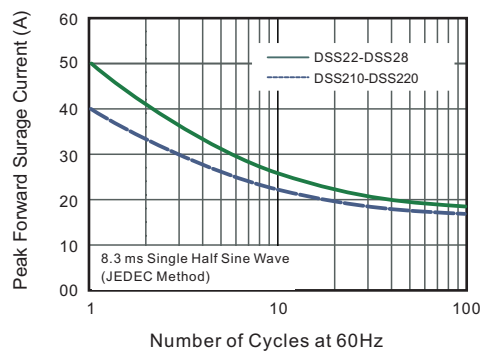
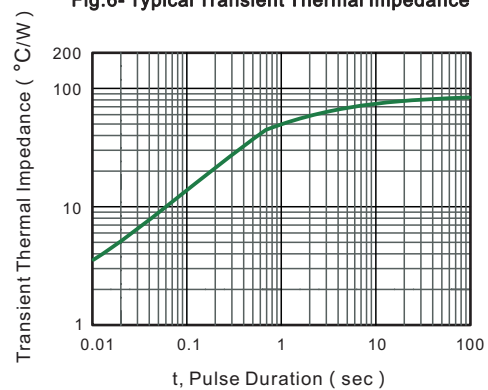


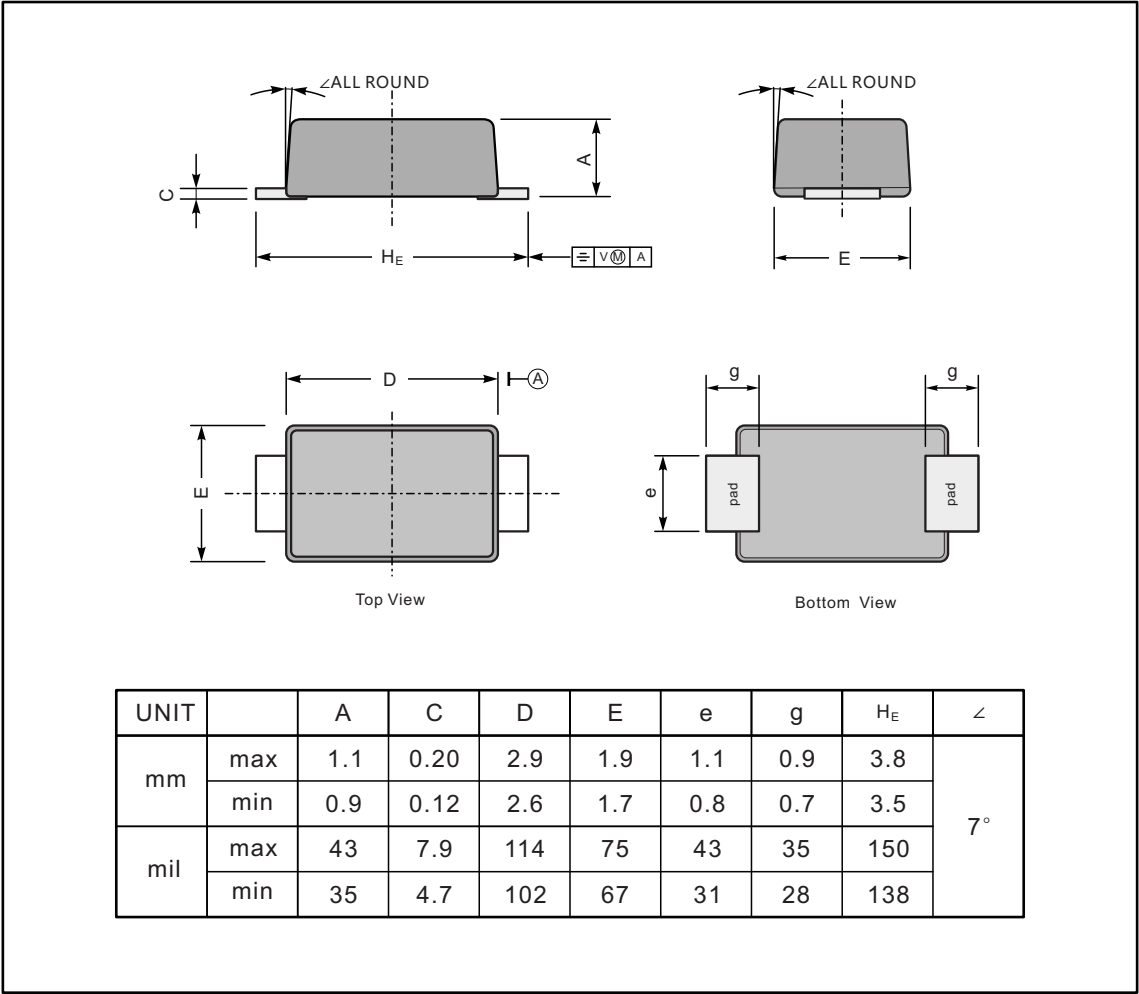
Fig.6- Typical Transient Thermal Impedance



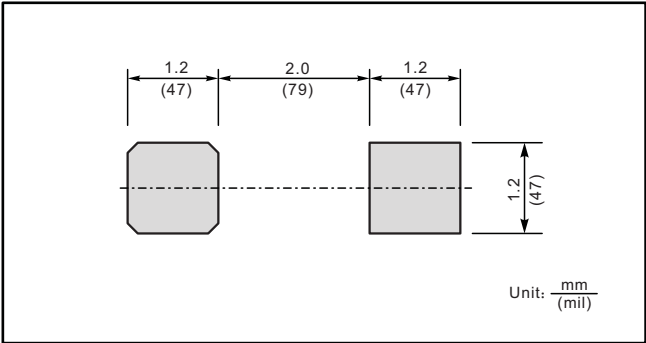
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123FL



The recommended mounting pad size



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