

/ Descriptions

100V 5.0A SMAF
Surface Mount Schottky Barrier Rectifier, Reverse Voltage 100V, Forward Current:5.0A ,SMAF thin package.

/ Features

Low power loss, high efficiency, High forward surge current capability, For use in low voltage, high frequency inverters, and polarity protection applications,For surface mounted applications,HF Product.

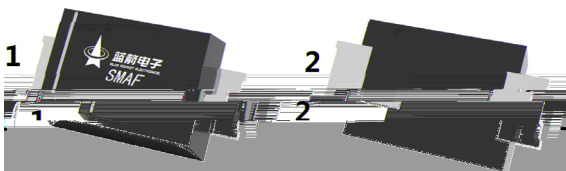
/ Applications

General purpose.

/ Equivalent Circuit

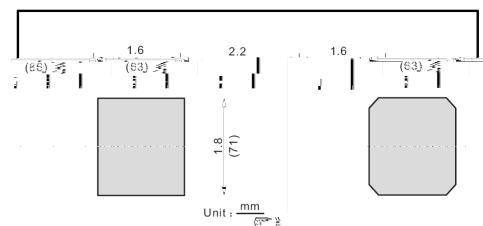


/ Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	5.0	A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150	A
Typical Junction Capacitance ¹⁾	C_i	400	pF
Typical Thermal Resistance ²⁾	R_{JA}	60	/W
Operating Junction Temperature Range	T_j	-55~150	
Storage Temperature Range	T_{stg}	-55~150	

Note:

- 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.

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Rating	Unit
Max Instantaneous Forward Voltage	V_F	$I_F=5.0A$	0.6	V
Maximum DC Reverse Current at Rated DC Reverse Voltage	I_R	$T_a=25$	1.0	mA
		$T_a=100$	50	

/ Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

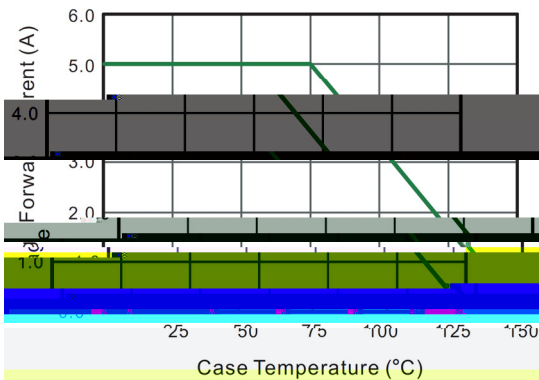


Fig.2 Typical Reverse Characteristics

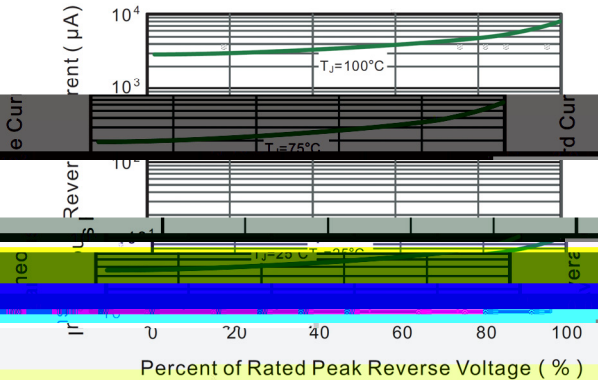


Fig.3 Typical Forward Characteristic

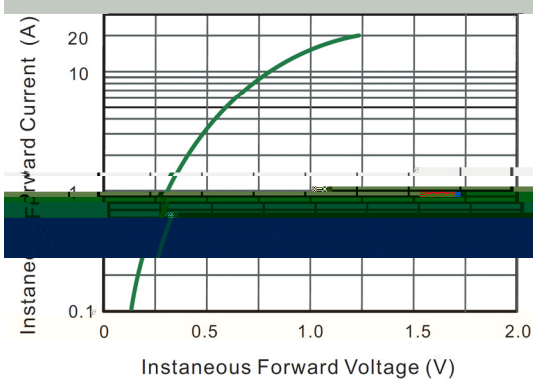


Fig.4 Typical Junction Capacitance

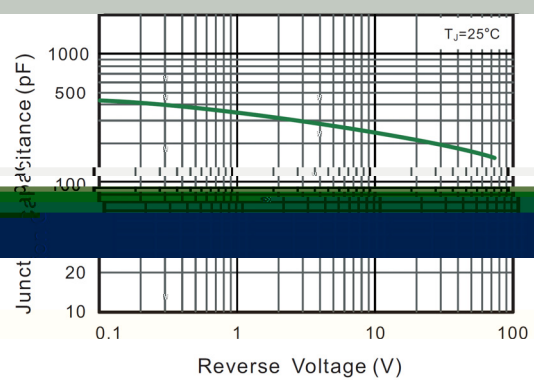


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

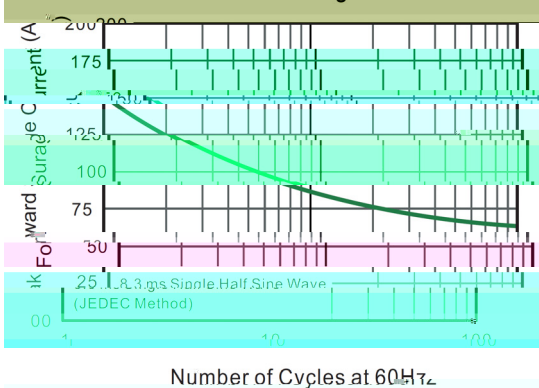
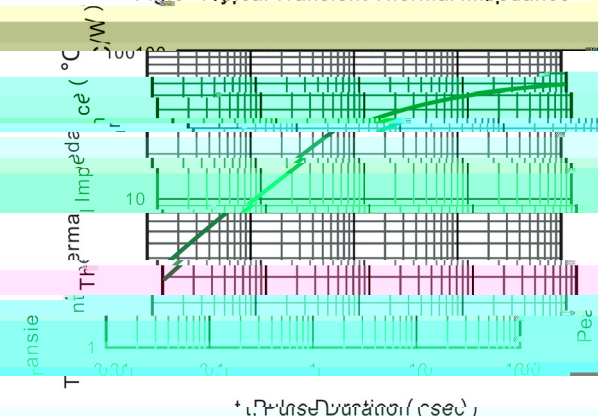
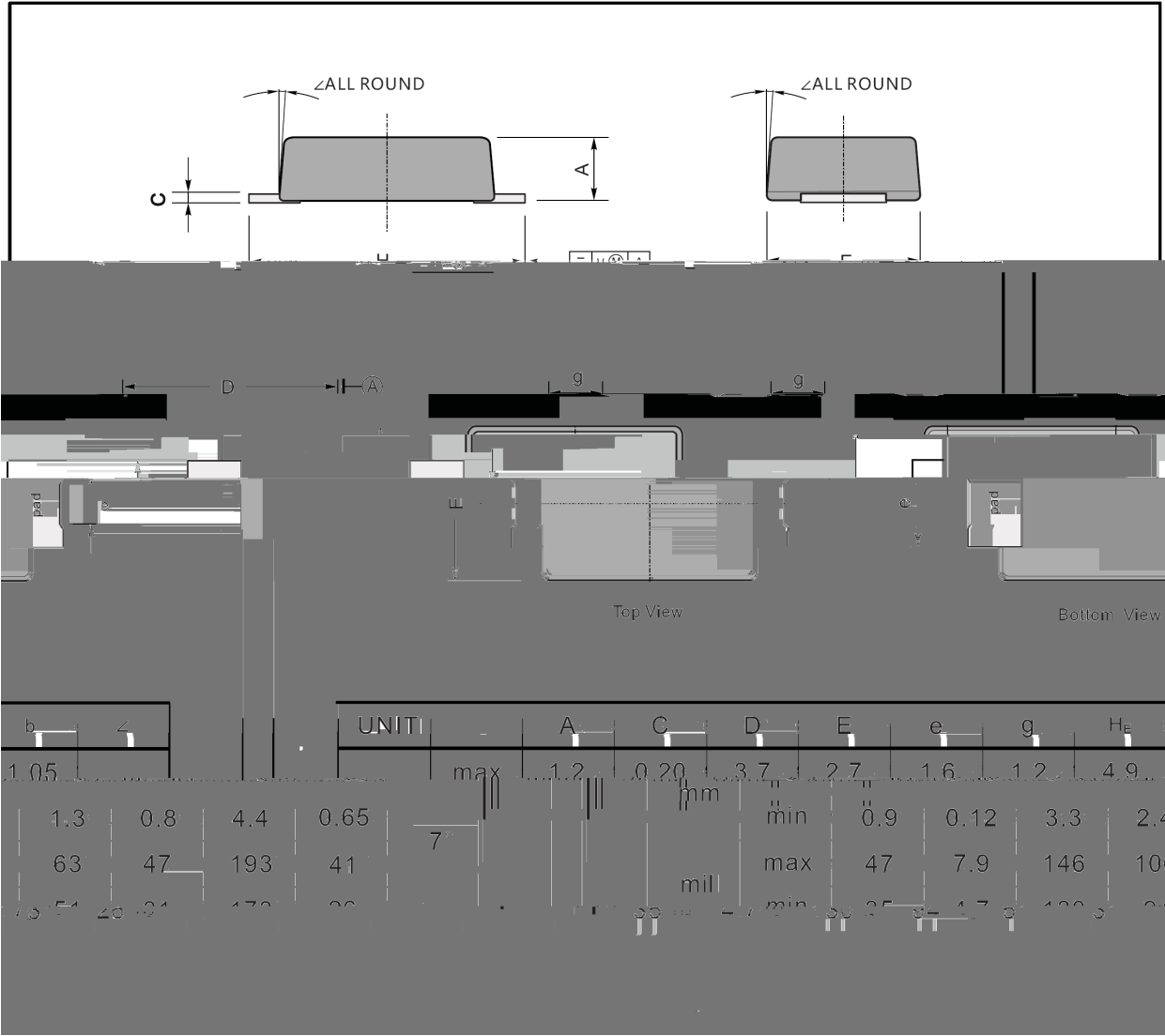


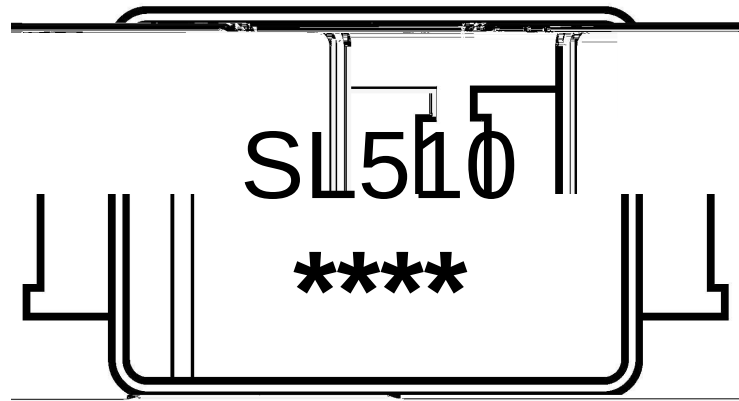
Fig.6 Typical Transient Thermal Impedance



/ Package Dimensions



/ Marking Instructions



SL510

Note:

SL510 Product Type Code

**** Lot No. Code, code change with Lot No

