

Rev.A Aug.-2023

100V

5.0A

SMAF

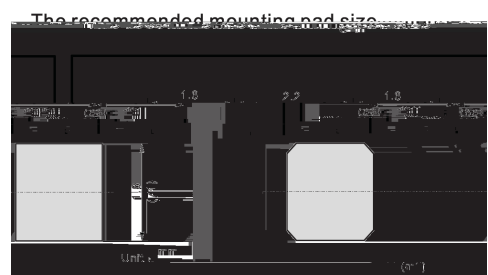
Surface Mount Schottky Barrier Rectifier, Reverse Voltage 100V, Forward Current:5.0A ,SMAF thin package.

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.

General purpose.



PIN	DESCRIPTION
1	Cathode
2	Anode



See Marking Instructions.

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⁾	$R_{\theta JA}$	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.

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	

Fig.1 Forward Current Derating Curve

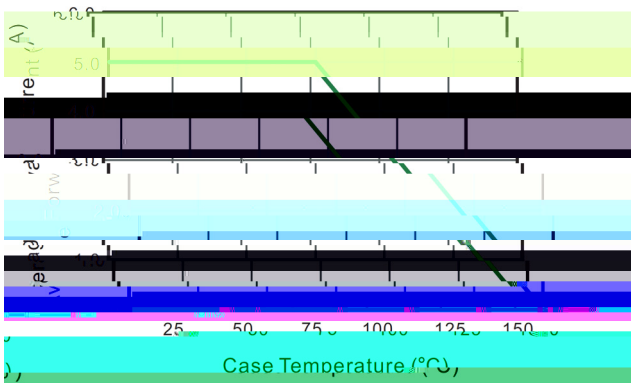


Fig.2 Typical Reverse Characteristics

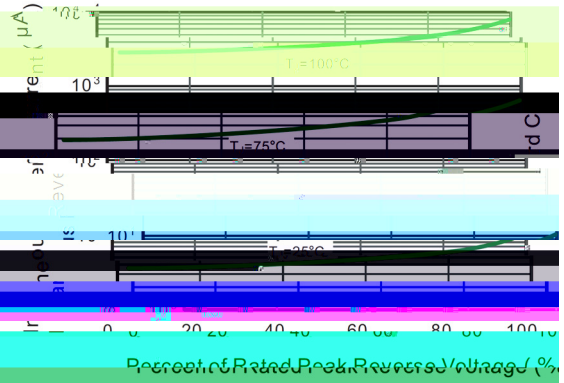


Fig.3 Typical Forward Characteristic

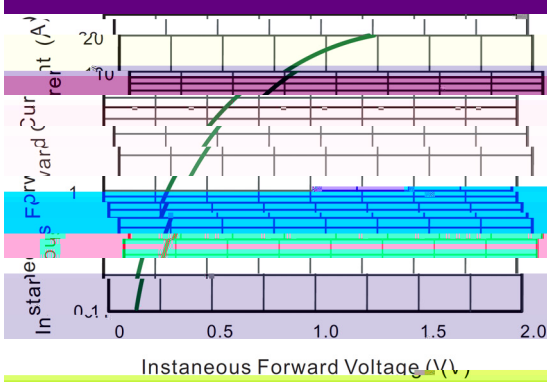


Fig.4 Typical Junction Capacitance

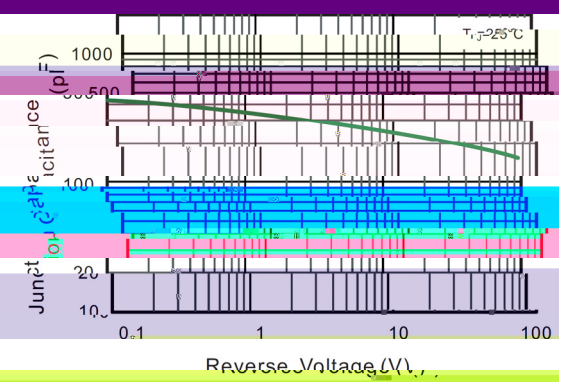


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

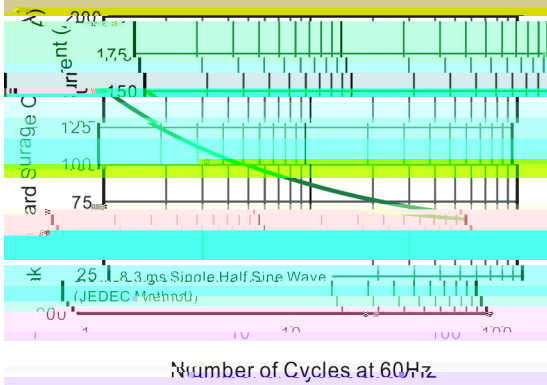
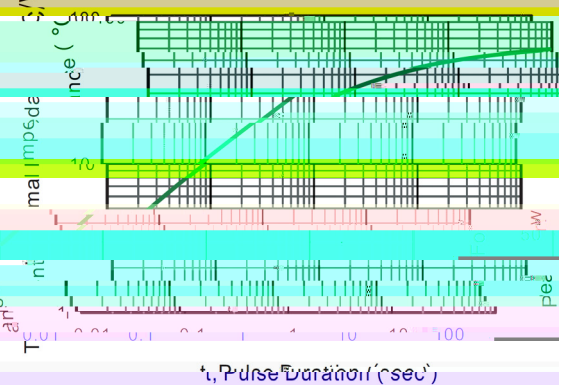
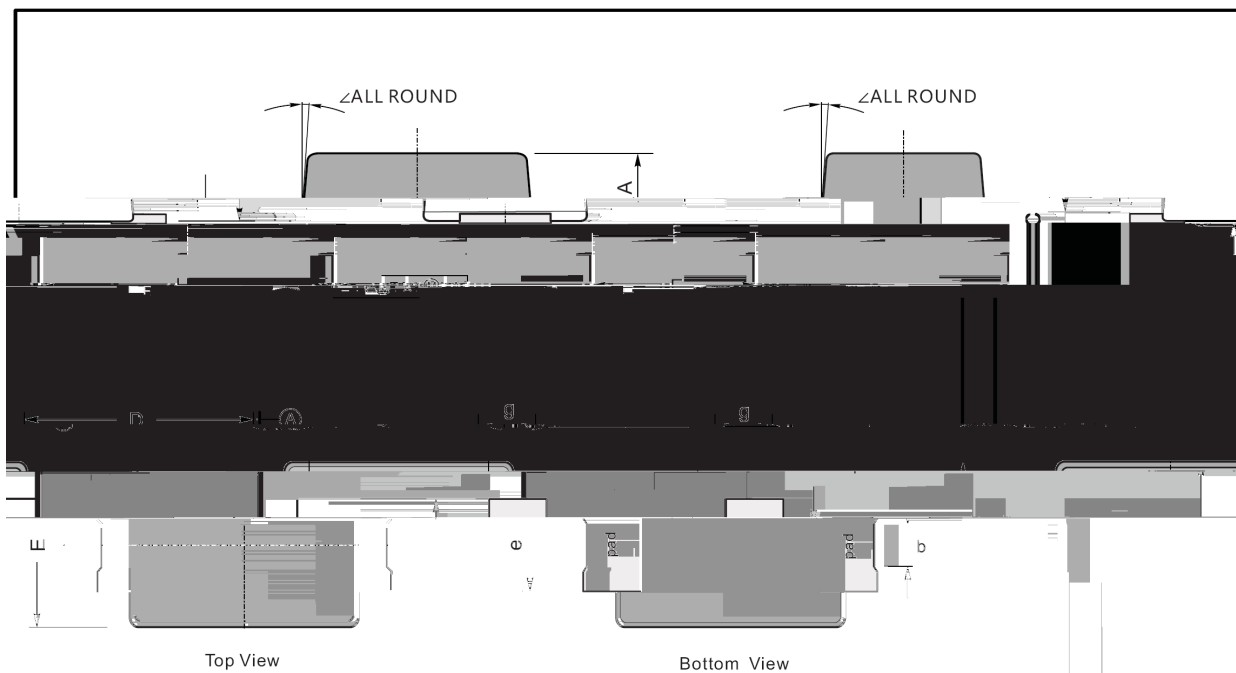
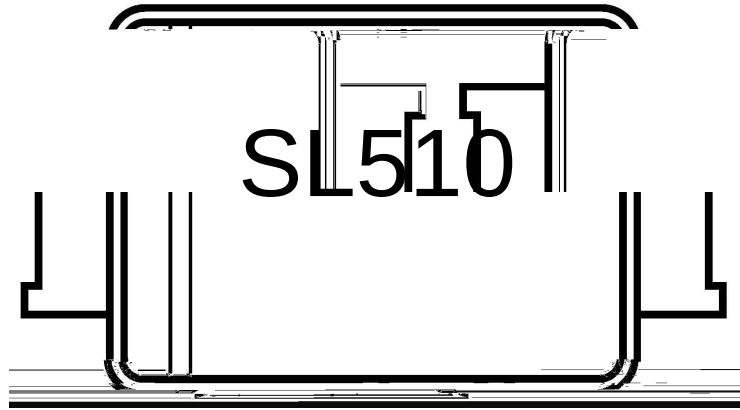


Fig.6 Typical Thermal Impedance





	A	C	D	E	e	g	H _E	b	∠			UNIT
max	1.2	0.20	3.7	2.7	1.6	1.2	4.9	1.05				
3	4.4	0.65			mm	min	0.9	0.12	3.3	2.4	1.3	0
	193	41	7°			max	47	7.9	146	106	63	4
	170	30		30	4.7	min	25	1.3	130	210	520	0
					mil							



SL510

Note:

SL510 Product Type Code

Lot No. Code, code change with Lot No

