

/ Descriptions

SMAF

Surface Mount Schottky Barrier Rectifier, Reverse Voltage 45 V, 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. Halogen free product.

/ Applications

General purpose.

/ Equivalent Circuit

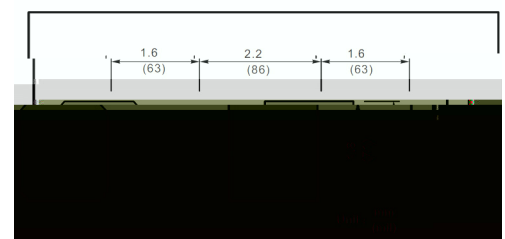


/ Pinning



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}	45	V
Maximum RMS voltage	V_{RMS}	32	V
Maximum DC Blocking Voltage	V_{DC}	45	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_j	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 1MHz and applied reverse voltage of 4V D.C
- 2 P.C.B. mounted with 2.0 X2.0" (5 X 5 cm) copper pad areas.

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Rating	Unit
Max Instantaneous Forward Voltage	V_F	$I_F=5.0A$	0.55	V
Maximum DC Reverse Current at Rated DC Reverse Voltage	I_R	$T_j=25$	1	mA
		$T_j=100$	50	

/ Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

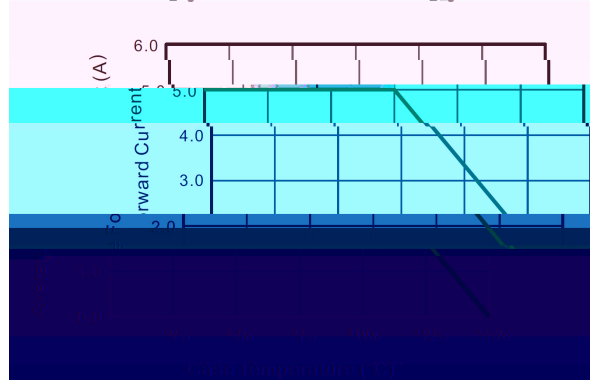


Fig.2 Typical Reverse Characteristics

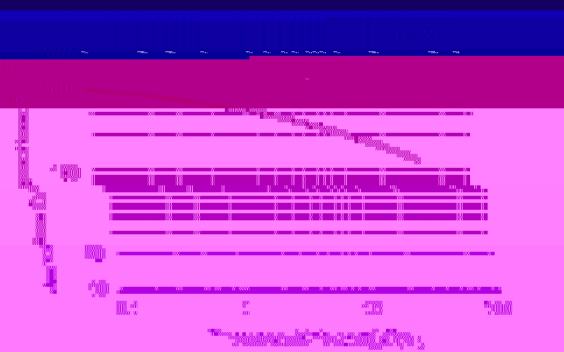
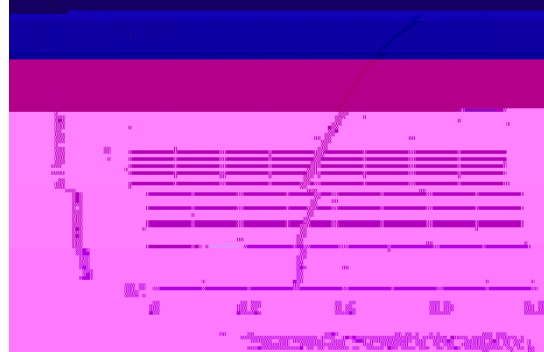
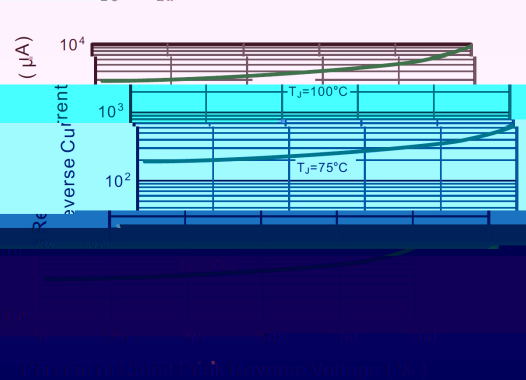


Fig.5 Maximum Non-Repetitive Pulse Forward Storage Charge

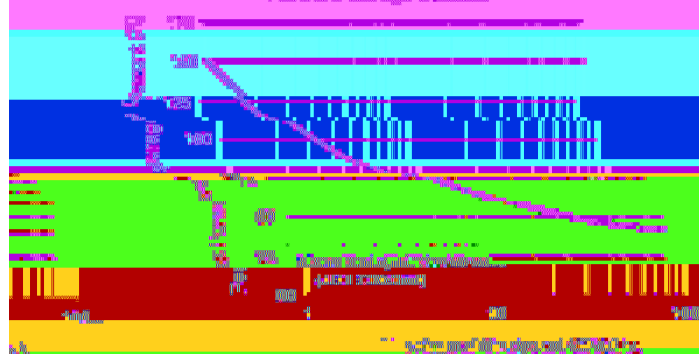
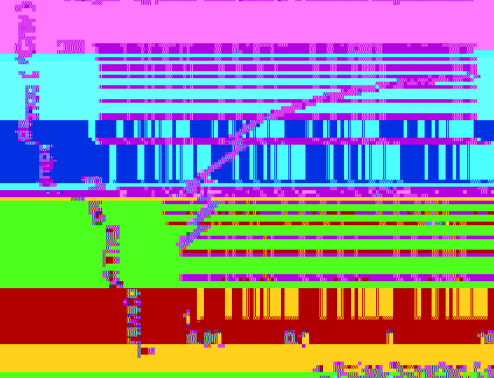


Fig.6 Typical Forward Transfer Characteristics

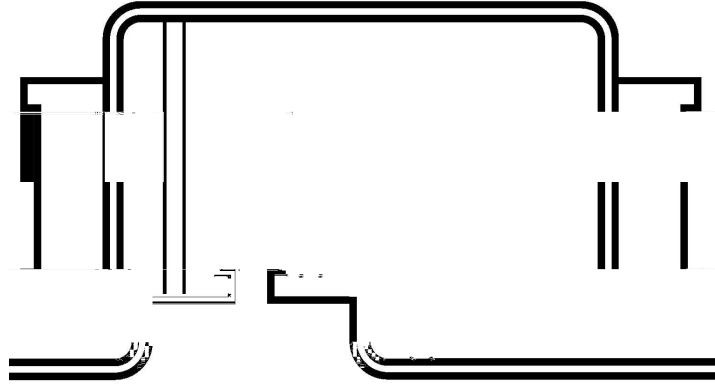


/ Marking Instructions

Marking

Type number	Marking code
SS545F	SS545

/ Marking Instructions



SS545F
Rev.B May.-2019



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ROCKET ELECTRONICS

DATA SHEET

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