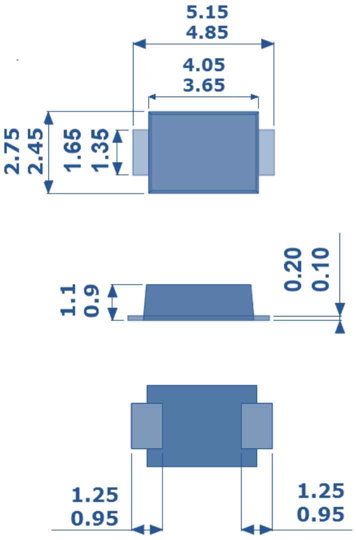
SS12F THRU SS16F

1.0A Schottky Barrier Rectifiers

1. 封裝 Package

- 封裝方式 Method: SMAF
- 封裝尺寸 Dimension: 如圖示



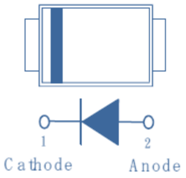
單位 Unit: millimeters

2. 產品特色 Features

- For surface mounted applications
- Ultra thin profile package for space constrained utilization
- Package suitable for automated handling
- Metal to silicon rectifier, majority carrier conduction.
- Low power loss, high efficiency.
- High surge capacity
- High current capacity, low V_F
- Meet with EU RoHS 2011/65/EU compliance
- Lead free and Green device

3. 機械數據 Mechanical Data

- Epoxy: UL94V-0 rated flame retardant
- Case: Epoxy, Molded
- Terminals: Solder plated solderable per MIL-STD-750 Method 2026
- Polarity: Color band denotes cathode end



4. 極限值與電參數 Maximum Ratings & Electrical Characteristic

Rating at 25^{O}C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

	Symbol	**SS12F**	**SS14F**	**SS16F**	UNITS
Marking Code	-	SS12	SS14	SS16	-
Recurrent Peak Reverse Voltage	V_{RRM}	20	40	60	Volts
RMS voltage	V_{RMS}	14	28	42	Volts
Maximum DC blocking voltage	V_R	20	40	60	Volts
Peak Forward Surge Current 8.3ms single half sine -wave superimposed on rated load (JEDEC Method)	I_{FSM}	30			Amps
Average Forward Current	$I_{F(AV)}$	1.0			Amps
Operating Junction Temperature and Storage Temperature Range	T_J,T_{STG}	-55~+150			^{O}C
Typical thermal resistance, Junction to Ambient (NOTE1)	$R_{\theta JA}$	150			^{O}C/W
Junction to Lead (NOTE2)	$R_{\theta JL}$	18			
Forward Voltage at 1.0A	V_F	0.5		0.7	Volts
DC reverse current at rated DC blocking voltage T_J=25℃	I_R	0.2		0.1	mA

Notes :

(1) Mounted on an FR4 PCB, single-sided copper, mini pad

(2) Mounted on an FR4 PCB, single-sided copper, with 48cm^2 copper pad area

5. 特性曲線 Rating & Characteristic Curves

Fig. 1 Forward Current Derating Curve

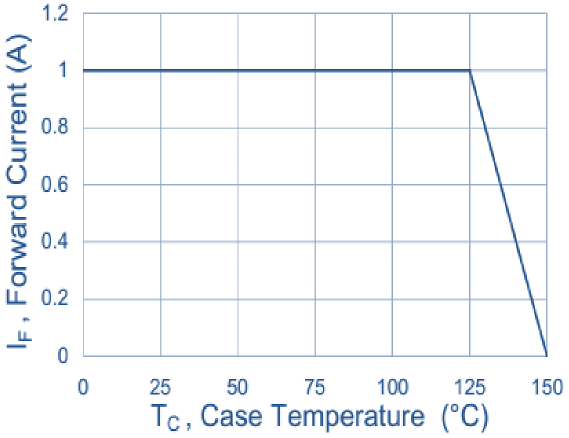


Fig. 2 Typical Forward Characteristics

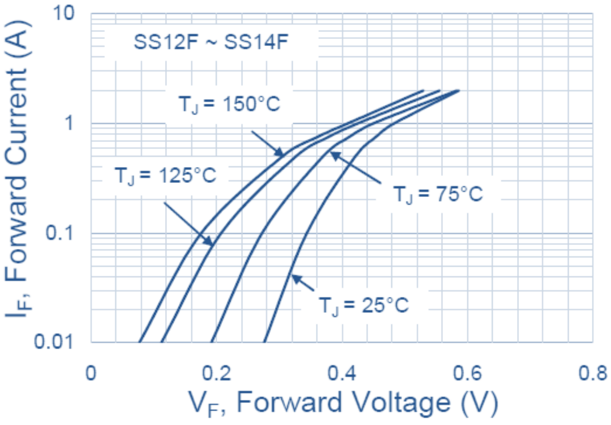


Fig. 3 Typical Forward Characteristics

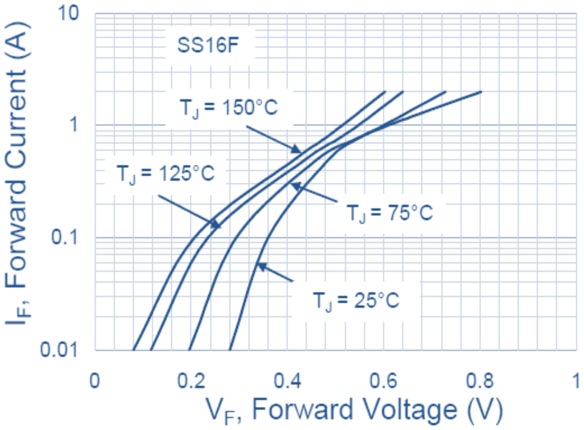


Fig. 4 Typical Reverse Characteristics

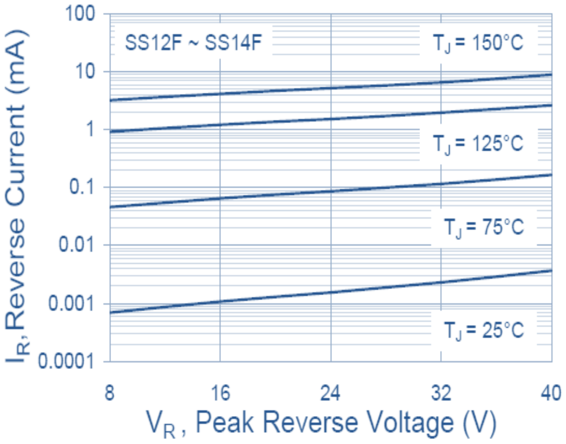
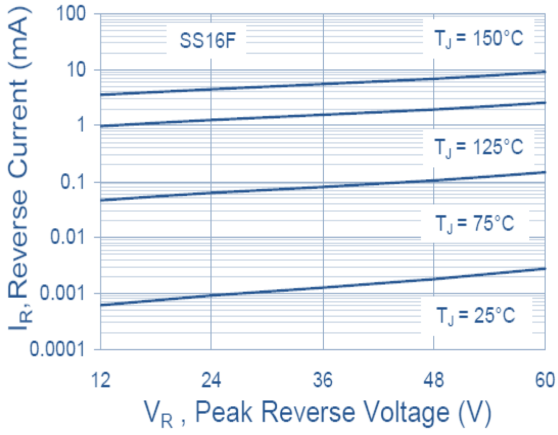
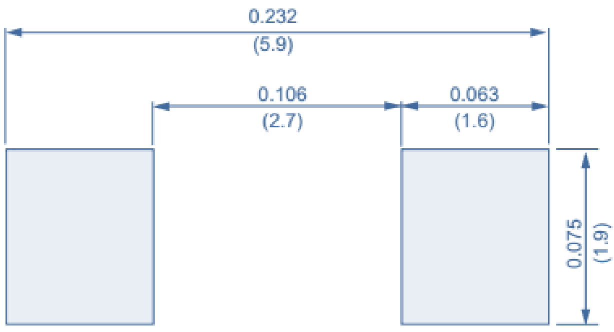


Fig. 5 Typical Reverse Characteristics



Pad Layout



Unit: inch (mm)