

# **Surface Mount General Purpose Silicon Rectifiers**

Reverse Voltage - 50 to 1000 V

Forward Current - 1 A

#### **Features**

♦For surface mounted applications

♦Low profile package

**♦**Glass Passivated Chip Junction

Ideal for automated placement

Lead free in comply with EU RoHS 2011/65/EU directives

#### **Mechanical Data**

♦Case: DO-214AC/SMA

♦Terminals: Solderable per MIL-STD-750, Method 2026

Approx. Weight: 0.07g / 0.002oz

## **Pinning**

1.Cathode	2.Anode
1 400	2
	DO-214AC/SMA

Marking Code				
M1	YFW M1			
M2	YFW M2			
М3	YFW M3			
M4	YFW M4			
M5	YFW M5			
М6	YFW M6			
М7	YFW M7			

#### **Maximum Ratings And Electrical Characteristics**

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	<b>M</b> 1	M2	М3	M4	M5	M6	M7	Units
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	٧
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	٧
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	v
Maximum Average Forward Rectified Current at T <sub>c</sub> = 125 °C	I <sub>F(AV)</sub>	1					А		
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I <sub>FSM</sub>	30					Α		
Maximum Instantaneous Forward Voltage at 1 A	V <sub>F</sub>	1.1				v			
Maximum DC Reverse Current T <sub>a</sub> = 25 °C at Rated DC Blocking Voltage T <sub>a</sub> =125 °C	I <sub>R</sub>	5 50				μA			
Typical Junction Capacitance (1)	C <sub>j</sub>	15				рF			
Typical Thermal Resistance <sup>(2)</sup>	$R_{\theta JA}$	75				°C/W			
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	-55 ~ +150			°C				

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

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



### **Ratings And Characteristic Curves**

Fig.1 Forward Current Derating Curve

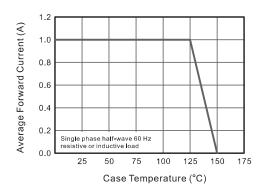


Fig.2 Typical Reverse Characteristics

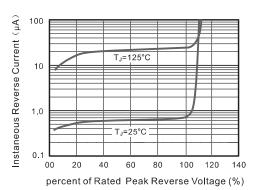


Fig.3 Typical Forward Characteristic

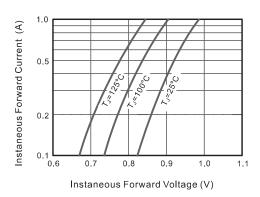


Fig.4 Typical Junction Capacitance

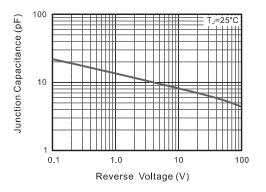
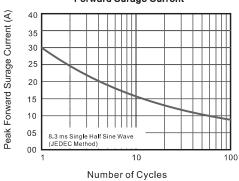
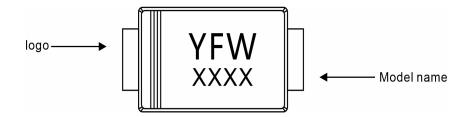


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current





### **Marking Diagram**

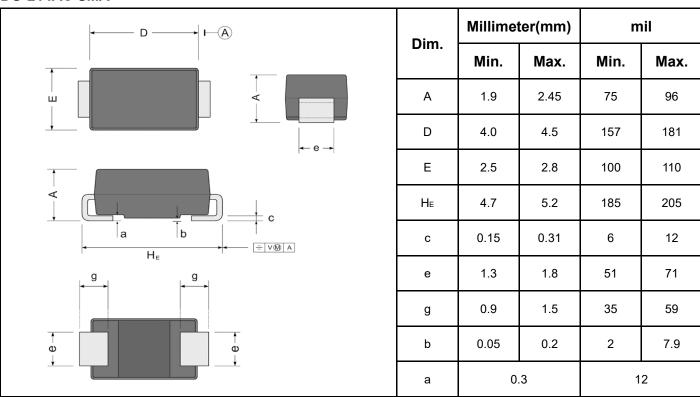


# **Ordering information**

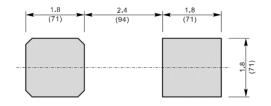
Package	Packing Description	Packing Quantity
DO-214AC SMA	Tape/Reel,13"reel	5000PCS/Reel 50000PCS/Carton
DO-214A0 0WA	Tape/Reel,7"reel	2000PCS/Reel 50000PCS/Carton

#### **Package Dimensions**

#### DO-214AC SMA



# The recommended mounting pad size



Unit:  $\frac{mm}{(mil)}$ 



### **Disclaimer**

The information presented in this document is for reference only. GuangDong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices),YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <a href="https://www.yfwdiode.com">https://www.yfwdiode.com</a>, or consult YFW sales office for further assistance.