

**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

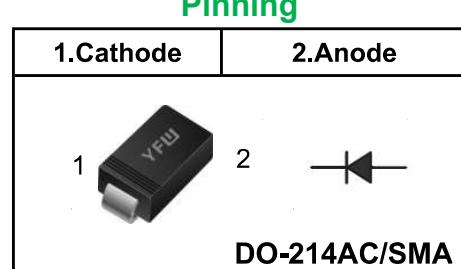
**Mechanical Data**

- ◆ Case: DO-214AC/SMA
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 0.07g / 0.002oz

**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 %.



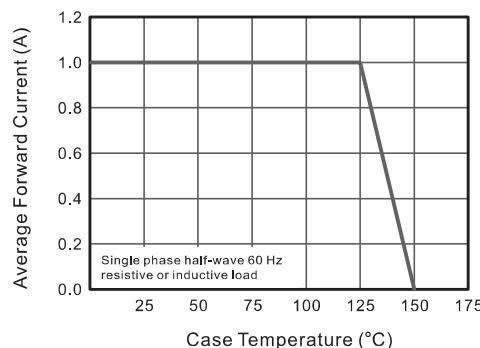
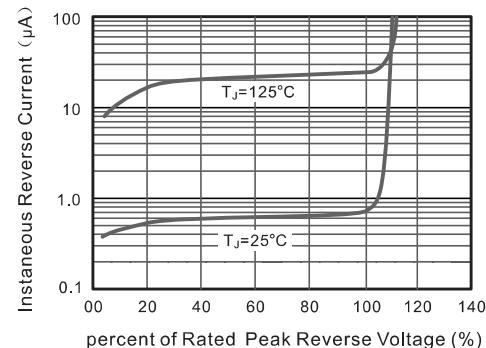
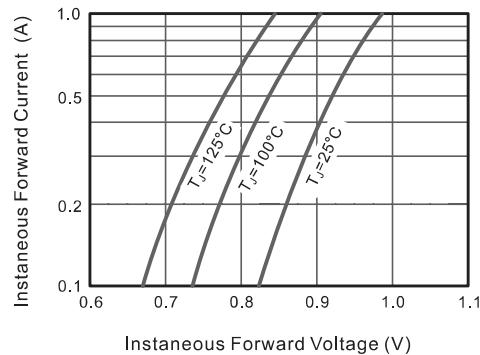
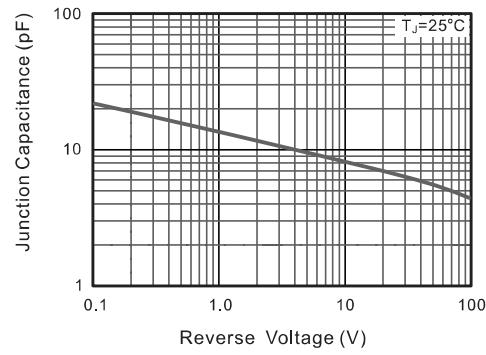
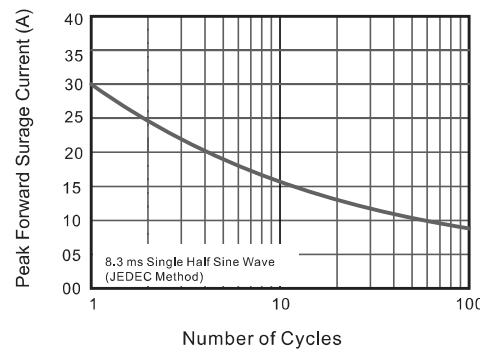
**Marking Code**

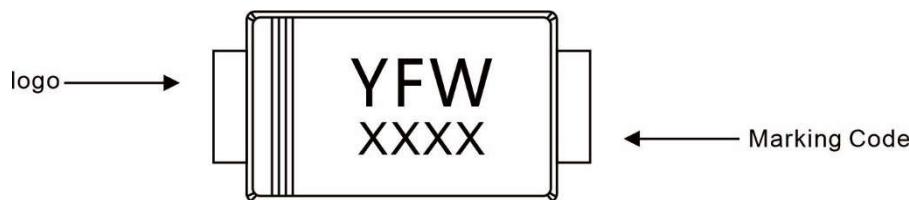
GS1A	YFW M1
GS1B	YFW M2
GS1D	YFW M3
GS1G	YFW M4
GS1J	YFW M5
GS1K	YFW M6
GS1M	YFW M7

Parameter	Symbols	GS1A	GS1B	GS1D	GS1G	GS1J	GS1K	GS1M	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at $T_c = 125^\circ C$	$I_{F(AV)}$	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	30							A
Maximum Instantaneous Forward Voltage at 1 A	$V_F$	1.1							V
Maximum DC Reverse Current $T_a = 25^\circ C$ at Rated DC Blocking Voltage $T_a=125^\circ C$	$I_R$	5 50							μA
Typical Junction Capacitance <sup>(1)</sup>	$C_j$	15							pF
Typical Thermal Resistance <sup>(2)</sup>	$R_{θJA}$	75							°C/W
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150							°C

(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.

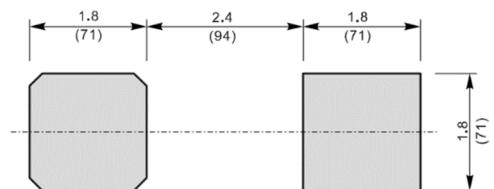
**Ratings And Characteristic Curves**
**Fig.1 Forward Current Derating Curve**

**Fig.2 Typical Reverse Characteristics**

**Fig.3 Typical Forward Characteristic**

**Fig.4 Typical Junction Capacitance**

**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**


**Marking Diagram**

**Ordering information**

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

**Package Dimensions**
**DO-214AC SMA**

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	1.9	2.45	75	96
D	4.0	4.5	157	181
E	2.5	2.8	100	110
H <sub>E</sub>	4.7	5.2	185	205
c	0.15	0.31	6	12
e	1.3	1.8	51	71
g	0.9	1.5	35	59
b	0.05	0.2	2	7.9
a	0.3		12	

**The recommended mounting pad size**

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

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