

0.5/0.2Amp High Voltage Rectifier

Reverse Voltage - 1200 to 5000 V

Forward Current – 0.5/0.2A

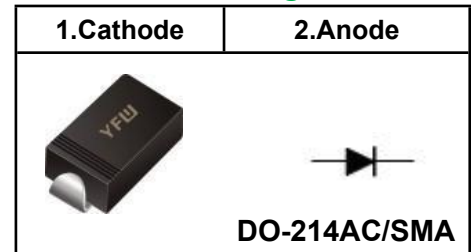
FEATURES

- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low profile package
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds, 0.375"(9.5mm) lead length, 5 lbs. (2.3kg) tension
- ◆ 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



Absolute Maximum Ratings and 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	R1200	R1500	R1800	R2000	R2500	R3000	R3500	R4000	R5000	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	1200	1500	1800	2000	2500	3000	3500	4000	5000	V
Maximum RMS voltage	V _{RMS}	840	1050	1260	1400	1750	2100	3450	2800	3500	V
Maximum DC Blocking Voltage	V _{DC}	1200	1500	1800	2000	2500	3000	3500	4000	5000	V
Maximum Average Forward Rectified Current at T _c = 125 °C	I _{F(AV)}	0.5			0.2						A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I _{FSM}	30.0									A
Maximum Instantaneous Forward Voltage at 0.2 A	V _F	2.0			3.0		4.0		5.0		V
Maximum DC Reverse Current T _a = 25 °C at Rated DC Blocking Voltage T _a =100 °C	I _R	5.0 50									μA
Typical Junction Capacitance ⁽¹⁾	C _j	15									pF
Typical Thermal Resistance ⁽²⁾	R _{θJA}	50									°C/W
Operating and Storage Temperature Range	T _j , T _{stg}	-65 ~ +175									°C

(1) Measured at 1MHz and applied reverse voltage of 4.0V D.C.

(2) Thermal resistance from junction to ambient at 0.375"(9.5mm)lead length,P.C.B. mounted

Ratings And Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

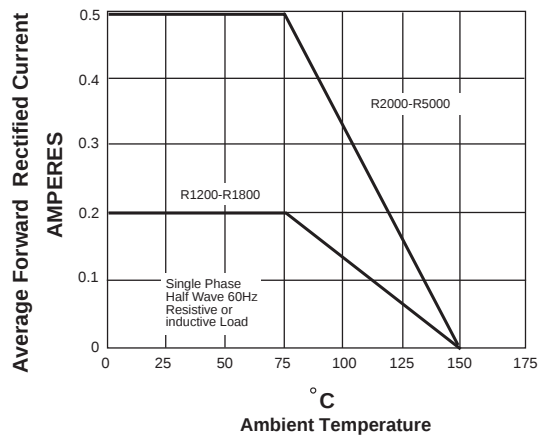


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

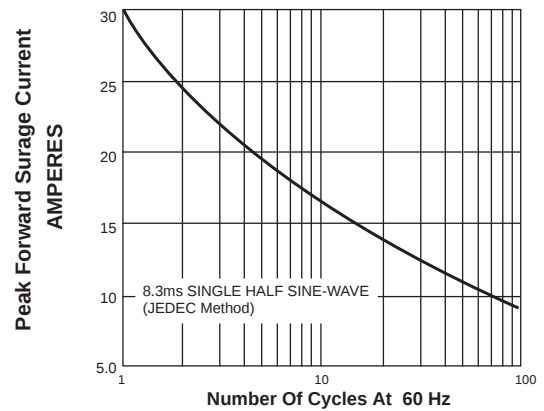
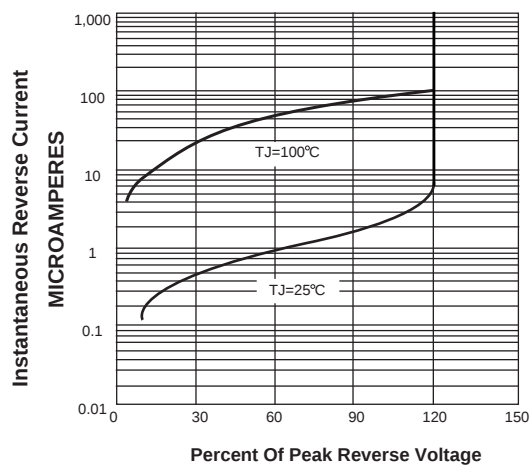


FIG. 3-TYPICAL REVERSE CHARACTERISTICS



Marking Diagram



Ordering information

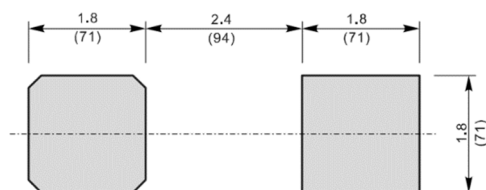
Package	Packing Description	Packing Quantity
DO-214AC SMA	Tape/Reel, 13" reel	5000PCS/Reel 50000PCS/Cartron

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

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 which 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 <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.