

**0.2Amp High Voltage Rectifier**  
**Reverse Voltage - 2800 to 4000 V**  
**Forward Current –0.2A**



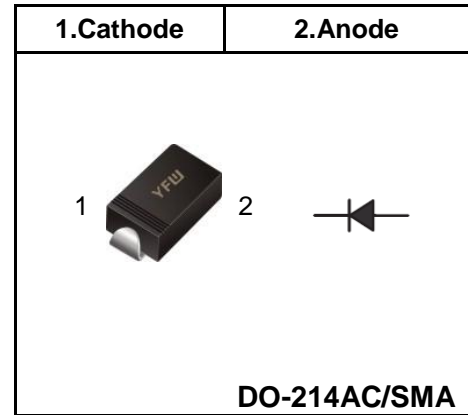
### FEATURES

- ◆The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆Fast switching for high efficiency
- ◆Open-Junction chip ,silastic passivated
- ◆Low reverse leakage
- ◆High forward surge current capability
- ◆High temperature soldering guaranteed: 250°C/10
- ◆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	R4000F	R4001F	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	2800	4000	V
Maximum RMS voltage	$V_{RMS}$	1960	2800	V
Maximum DC Blocking Voltage	$V_{DC}$	2800	4000	V
Maximum Average Forward Rectified Current at $T_c = 125\text{ }^\circ\text{C}$	$I_{F(AV)}$	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	$V_F$	5.0		V
Maximum DC Reverse Current $T_a = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_a = 100\text{ }^\circ\text{C}$	$I_R$	10.0 200.0		$\mu\text{A}$
Maximum reverse recovery time <sup>(Note 1)</sup>	$T_{RR}$	500		nS
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150		$^\circ\text{C}$

(1) Reverse recovery time test condition:  $I_F=0.5\text{A}$   $I_R=1.0\text{A}$   $I_{rr}=0.25\text{A}$

# Ratings And Characteristic Curves

## R4000F THRU R4001F

FIG. 1- FORWARD CURRENT DERATING CURVE

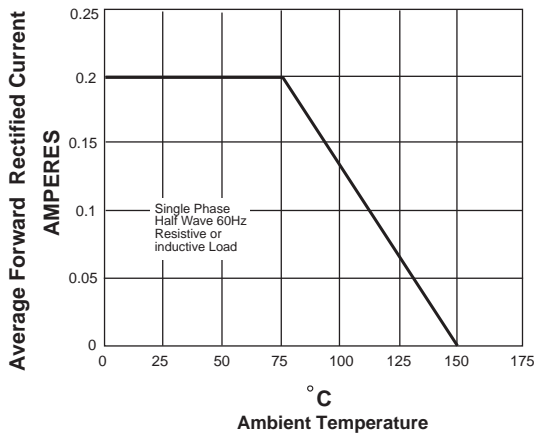


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

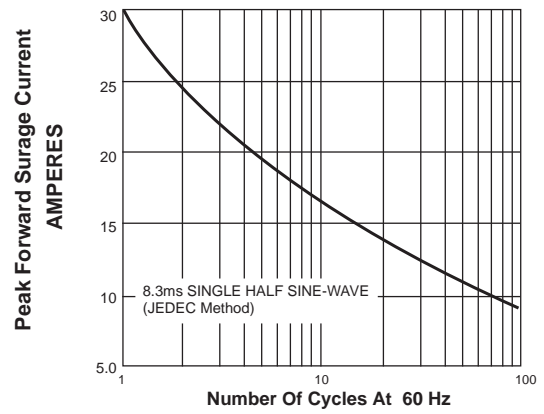


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

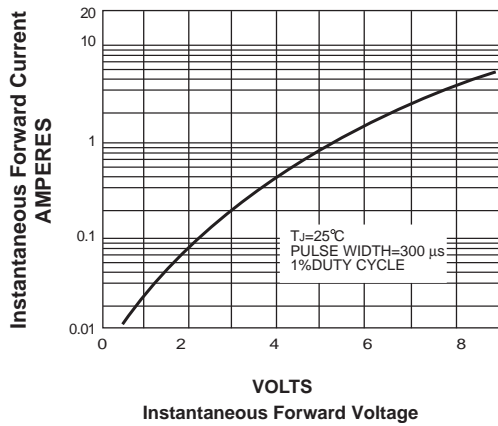
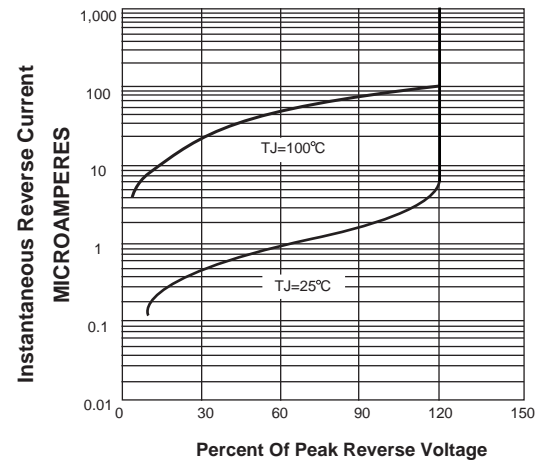
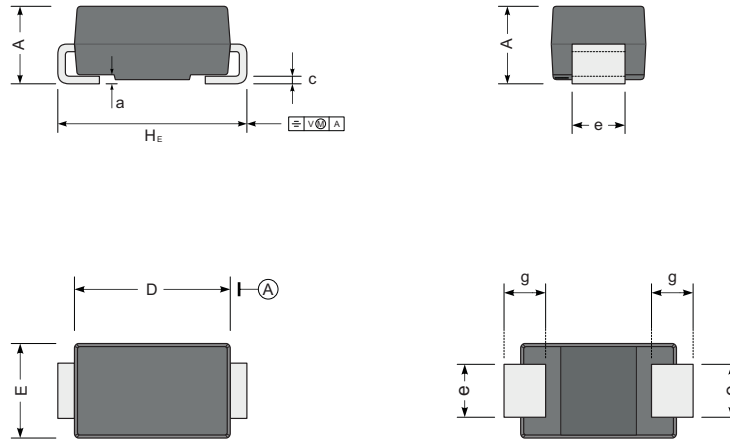


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



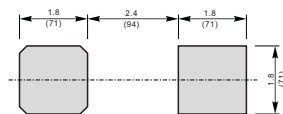
**Package Outline DO-214AC SMA**

Plastic surface mounted package; 2 leads



UNIT		A	D	E	H <sub>E</sub>	c	e	g	a
mm	max	2.42	4.5	2.80	5.2	0.31	1.6	1.5	0.3
	min	1.98	4.0	2.54	4.7	0.15	1.3	0.9	
mil	max	96	181	110	205	12	63	59	12
	min	78	157	100	185	6	51	35	

**The recommended mounting pad size**



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

**Summary of Packing Options**

Package	Packing Description	Packing Quantity	Industry Standard
DO-214AC SMA	Tape/Reel, 11" reel	5000	EIA-481-1
	Tape/Reel, 7" reel	2000	EIA-481-1