

0.5/0.2Amp High Voltage Rectifier
Reverse Voltage - 1200 to 5000 V
Forward Current – 0.5/0.2A



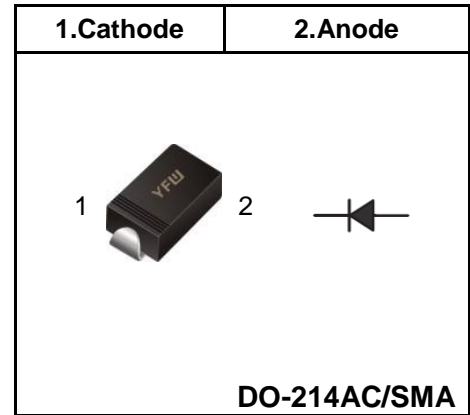
FEATURES

- ◆ 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 $T_c = 125\text{ }^\circ\text{C}$	$I_{F(AV)}$	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 0.5 A	V_F	2.0			3.0		4.0		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									μA
Typical Junction Capacitance ⁽¹⁾	C_j	15									pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	50									$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150									$^\circ\text{C}$

(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

R1200 THRU R5000

FIG. 1- FORWARD CURRENT DERATING CURVE

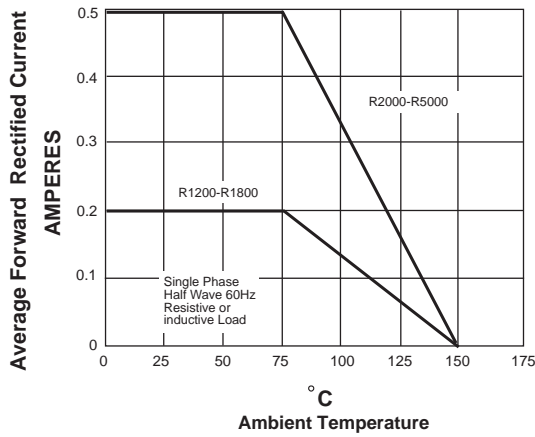


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

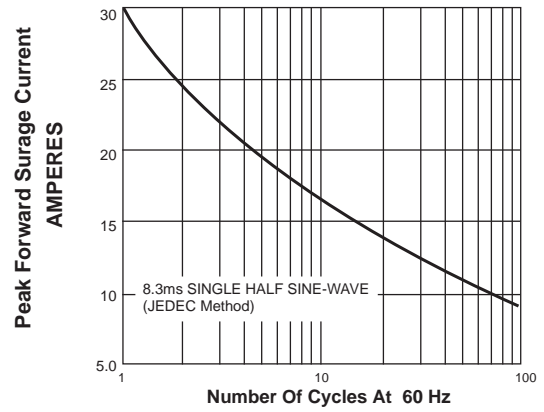
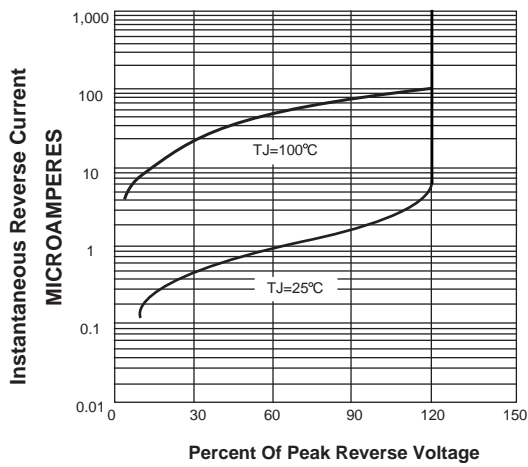
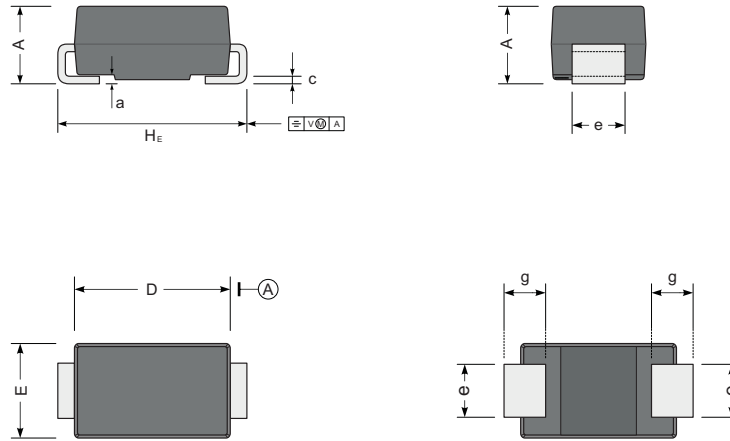


FIG. 3-TYPICAL REVERSE CHARACTERISTICS



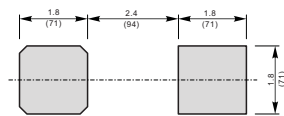
Package Outline DO-214AC SMA

Plastic surface mounted package; 2 leads



UNIT		A	D	E	H _E	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