

Surface Mount General Purpose Silicon Rectifiers Reverse

Voltage - 2000 V

Forward Current - 1 A

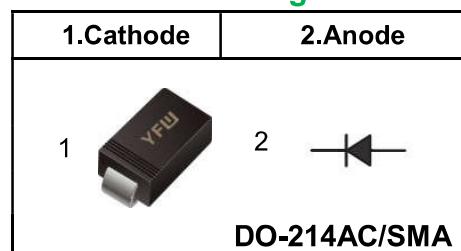
Features

- ◆ For surface mounted applications
- ◆ Low profile package
- ◆ Glass Passivated Chip Junction
- ◆ Easy to pick and place
- ◆ 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



Marking Code

H2000	H2000
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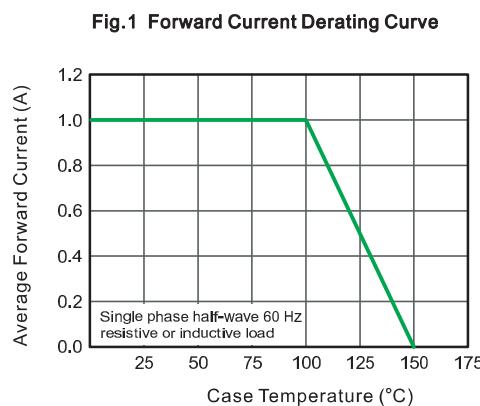
Maximum Ratings And Electrical Characteristics

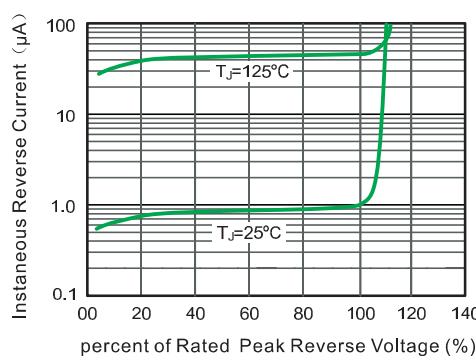
Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	H2000	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	2000	V
Maximum Average Forward Rectified Current at $T_c = 100 \text{ }^\circ\text{C}$	$I_{F(AV)}$	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 $T_a = 25 \text{ }^\circ\text{C}$ at Rated DC Blocking Voltage $T_a=125 \text{ }^\circ\text{C}$	I_R	5 50	μA
Typical Junction Capacitance ⁽¹⁾	C_j	20	pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	95	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	$^\circ\text{C}$

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

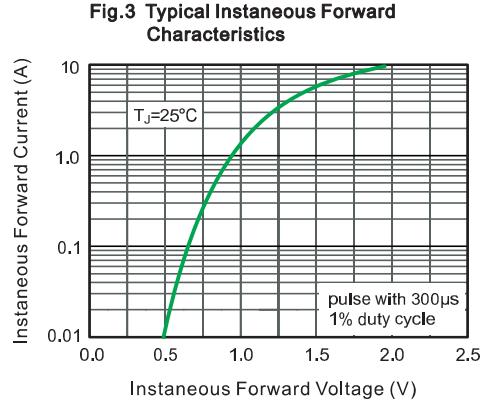
(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Ratings and Characteristic Curves

Fig.2 Typical Reverse Characteristics



percent of Rated Peak Reverse Voltage (%)	Instantaneous Reverse Current (μ A) ($T_J = 25^\circ C$)	Instantaneous Reverse Current (μ A) ($T_J = 125^\circ C$)
0	0.5	50
20	0.8	80
40	1.0	100
60	1.0	100
80	1.0	100
100	1.0	100
110	1.0	100
120	1.0	100
130	1.0	100
140	1.0	100
150	1.0	100
160	1.0	100
170	1.0	100
180	1.0	100
190	1.0	100
200	1.0	100
210	1.0	100
220	1.0	100
230	1.0	100
240	1.0	100
250	1.0	100
260	1.0	100
270	1.0	100
280	1.0	100
290	1.0	100
300	1.0	100
310	1.0	100
320	1.0	100
330	1.0	100
340	1.0	100
350	1.0	100
360	1.0	100
370	1.0	100
380	1.0	100
390	1.0	100
400	1.0	100
410	1.0	100
420	1.0	100
430	1.0	100
440	1.0	100
450	1.0	100
460	1.0	100
470	1.0	100
480	1.0	100
490	1.0	100
500	1.0	100
510	1.0	100
520	1.0	100
530	1.0	100
540	1.0	100
550	1.0	100
560	1.0	100
570	1.0	100
580	1.0	100
590	1.0	100
600	1.0	100
610	1.0	100
620	1.0	100
630	1.0	100
640	1.0	100
650	1.0	100
660	1.0	100
670	1.0	100
680	1.0	100
690	1.0	100
700	1.0	100
710	1.0	100
720	1.0	100
730	1.0	100
740	1.0	100
750	1.0	100
760	1.0	100
770	1.0	100
780	1.0	100
790	1.0	100
800	1.0	100
810	1.0	100
820	1.0	100
830	1.0	100
840	1.0	100
850	1.0	100
860	1.0	100
870	1.0	100
880	1.0	100
890	1.0	100
900	1.0	100
910	1.0	100
920	1.0	100
930	1.0	100
940	1.0	100
950	1.0	100
960	1.0	100
970	1.0	100
980	1.0	100
990	1.0	100
1000	1.0	100

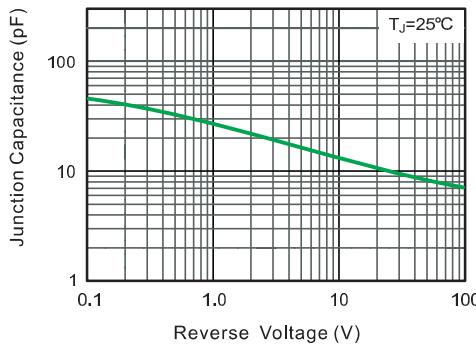
Fig.3 Typical Instantaneous Forward Characteristics



Instantaneous Forward Voltage (V)	Instantaneous Forward Current (A) ($T_J = 25^\circ C$)
0.5	0.01
1.0	0.5
1.5	5.0
2.0	10.0

$T_J = 25^\circ C$
pulse with 300 μ s 1% duty cycle

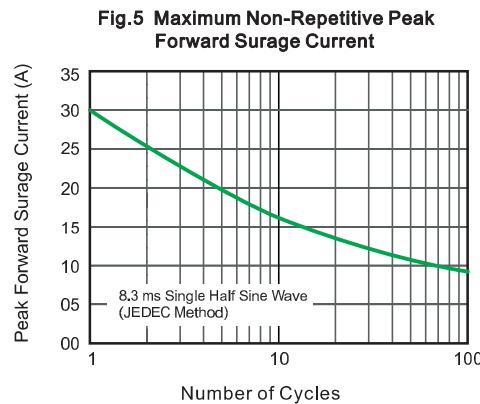
Fig.4 Typical Junction Capacitance



Reverse Voltage (V)	Junction Capacitance (pF) ($T_J = 25^\circ C$)
0.1	50
1.0	10
10	2
100	1

$T_J = 25^\circ C$

Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



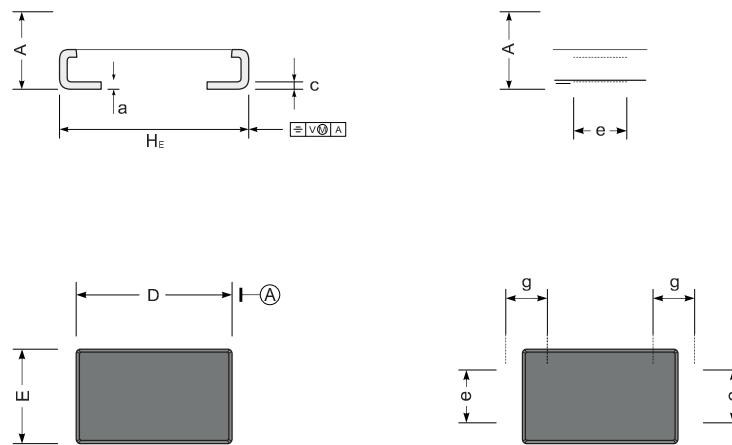
Number of Cycles	Peak Forward Surge Current (A)
1	30
10	15
100	10

8.3 ms Single Half Sine Wave (JEDEC Method)

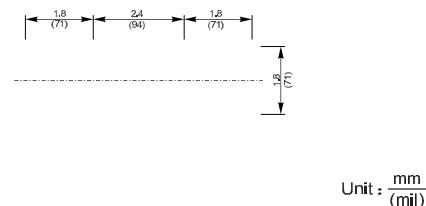
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GuangDong YFW Electronics Co, Ltd.

www.yfwdiode.com

Package Outline
DO-214AC SMA
Plastic surface mounted package; 2leads


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

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