

Surface Mounted Supper Fast Rectifiers

Reverse Voltage - 800 to 1000 V

Forward Current - 2 A

FEATURES

- ◆Low reverse leakage
- ◆High forward surge capability
- ◆High reliability
- ◆High temperature soldering guaranteed:260°C/10seconds
- ◆Lead and body according with RoHS standard

MECHANICAL DATA

◆Case: DO-214AC/SMA

◆Approx. Weight: 0.07g /0.002oz

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	ES2K	ES2M	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	800	1000	V
Maximum RMS voltage	V_{RMS}	560	700	V
Maximum DC Blocking Voltage	V_{DC}	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2		A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	40		A
Maximum Instantaneous Forward Voltage at 2 A	V_F	3.2		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	5 100		μA
Typical Junction Capacitance at $V_R=4\text{V}, f=1\text{MHZ}$	C_j	25		pF
Maximum Reverse Recovery Time ⁽¹⁾	T_{rr}	35		nS
Typical Thermal Resistance ⁽¹⁾	$R_{\theta JA}$	105		$^{\circ}\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150		$^{\circ}\text{C}$

1) Thermal resistance from junction to ambient, PCB mounted.

Pinning

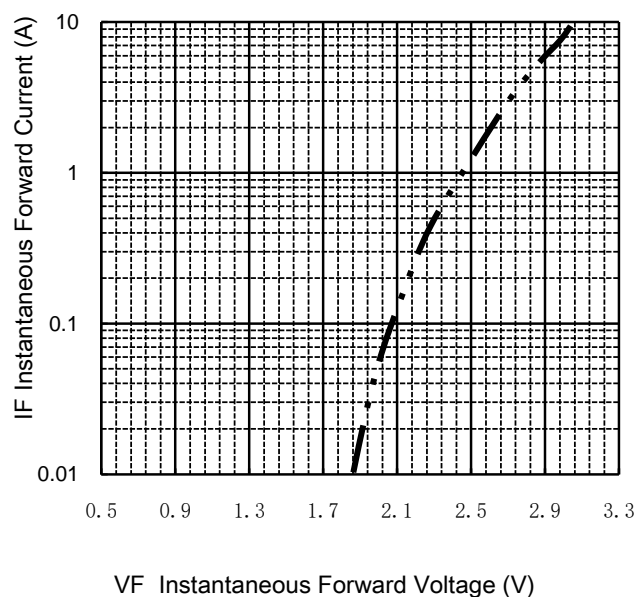
1.Cathode	2.Anode
	
DO-214AC/SMA	

Marking Code

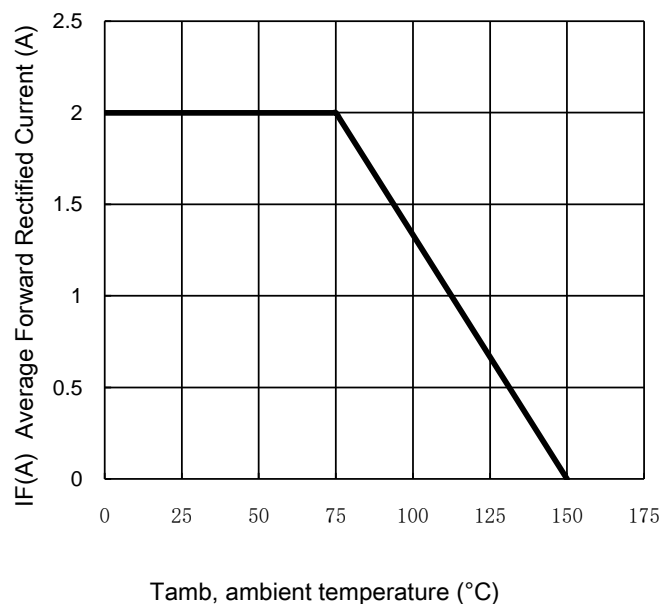
ES2K	YFW ES2K
ES2M	YFW ES2M

Ratings And Characteristic Curves

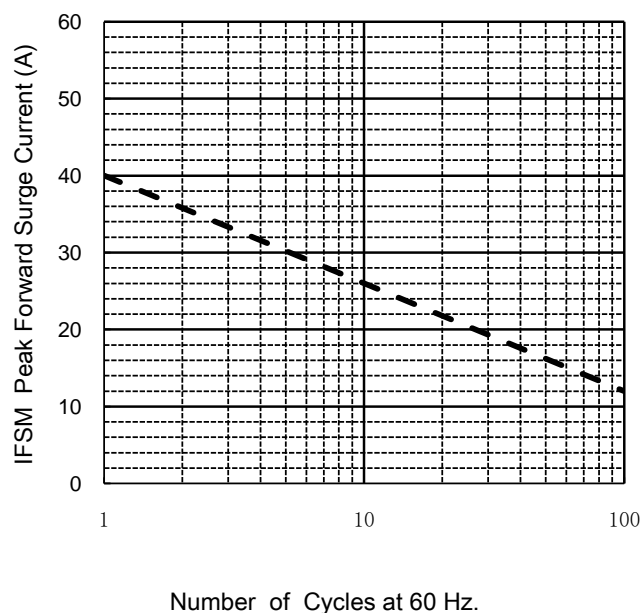
TYPICAL FORWARD CHARACTERISTIC



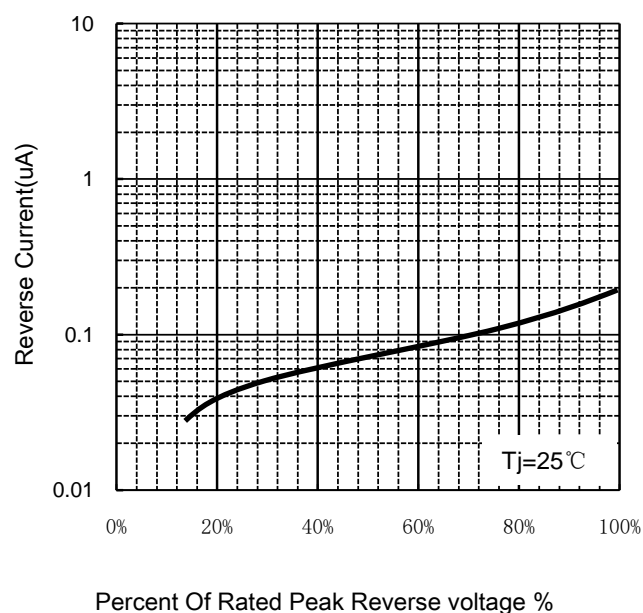
FORWARD CURRENT DERATING CURVE



**MAXIMUM NON REPETITIVE
PEAK FORWARD SURGE CURRENT**



TYPICAL REVERSE CHARACTERISTICS



Marking Diagram



Ordering information

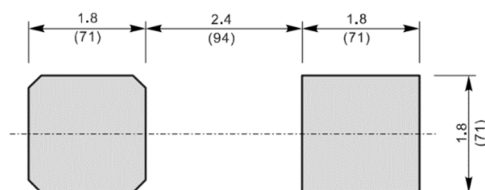
Package	Packing Description	Packing Quantity
DO-214AC SMA	Tape/Reel, 13" reel	5000PCS/Reel 50000PCS/Carton

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

Disclaimer

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