ES1A THRU ES1J SMA

Surface Mount Superfast Recovery Rectifier

Reverse Voltage - 50 to 600 V

Forward Current - 1 A

Pinning

1.Cathode	2.Anode



DO-214AC/SMA

FEATURES

Glass Passivated Chip Junction
For surface mounted applications
Low profile package
Superfast reverse recovery time
Lead free in comply with EU RoHS 2011/65/EU directives

Marking Code	
ES1A	YFW ES1A
ES1B	YFW ES1B
ES1D	YFW ES1D
ES1G	YFW ES1G
ES1J	YFW ES1J

MECHANICAL DATA

Case: DO-214AC/SMA
Terminals: Solderable per MIL-STD-750, Method 2026
Approx. Weight: 0.07g /0.002oz

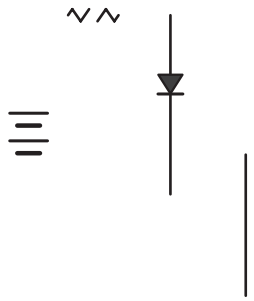
Absolute Maximum Ratings and characteristics

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	ES1A	ES1B	ES1D	ES1G	ES1J	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current at T_c = 125 °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	0.95			1.25	1.65	V
Maximum DC Reverse Current T_a = 25 °C at Rated DC Blocking Voltage T_a=125 °C	I_R	5 100					X
Typical Junction Capacitance at V_R=4V,f=1MHZ	C_j	15					pF
Maximum Reverse Recovery Time (1)	Trr	35					nS
Typical Thermal Resistance (2)	R_{ZJA}	110					°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150					°C

(1) Measured with I_F=0.5A,I_R=1A,I_n=0.25A

(2) P.C.B. mounted with 1.0" X 1.0" (2.54 X 2.54 cm) copper pad areas.



Marking Diagram

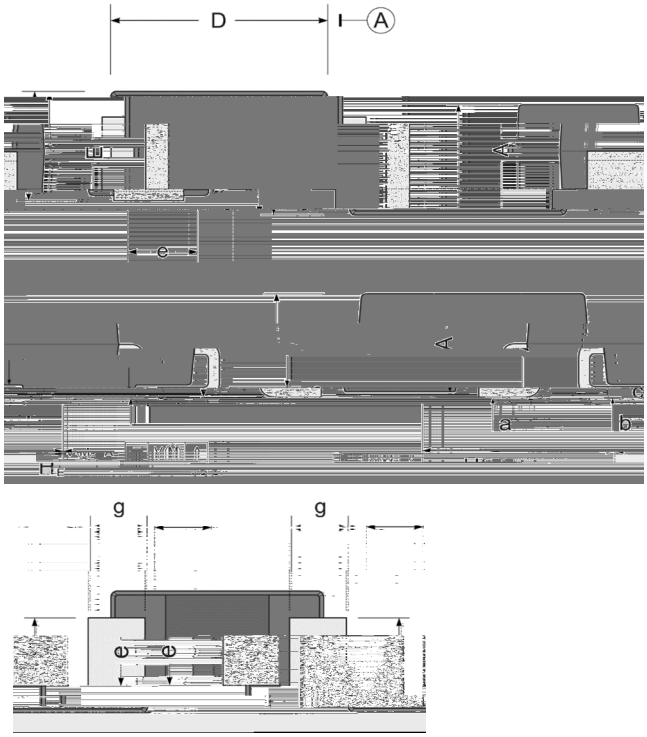


Ordering information

Package	Packing Description	Packing Quantity
DO-214AC SMA		

Package Dimensions

DO-214AC SMA



Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.

The recommended mounting pad size

