





An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

SURFACE MOUNT SUPERFAST RECTIFIER

ES1A - ES1J



DO-214AC (SMA)
Surface Mount Package

Cathode is marked by a Band

Superfast recovery times for high efficiency, Glass passivated junction.

ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_A = 25^{\circ}$ C unless otherwise specified) Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

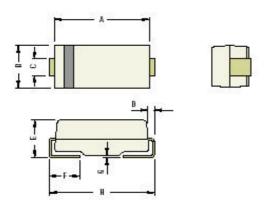
DESCRIPTION	SYMBOL	VALUE						UNIT	
DESCRIPTION		ES1A	ES1B	ES1C	ES1D	ES1E	ES1G	ES1J	UNII
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current	1		1.0						Α
0.375" (9.5mm) lead length @ T _L =120°C	I _(AV)	1.0							
Peak Forward Surge Current, 8.3ms									
single half sine-wave superimposed on	I_{FSM}	30							Α
rated load (JEDEC method)									
Maximum Forward Voltage @ 1.0A	V_{F}		0.9	95		1.	.25	1.7	V
Maximum DC Reverse Current $T_A = 25^{\circ}C$		5.0			^				
@ Rated DC Blocking Voltage T _A = 100°C	I _R	150				μΑ			
Maximum Reverse Recovery Time (Note 1)	t _{rr}	35					ns		
Typical Junction Capacitance (Note2)	C _j	7				pF			
Maximum Thermal Resistance (Note3)	$R_{th(j-l)}$	35					°C/W		
Operating Junction Temperature and Storage Temperature Range	T _j , T _{stg}	-50 to +150				°C			

NOTES:

- 1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1A, I_{RR}=0.25A
- 2. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 3. 8.0 mm² (0.013mm thick) land areas.

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DO-214AC (SMA) SMD Plastic Package

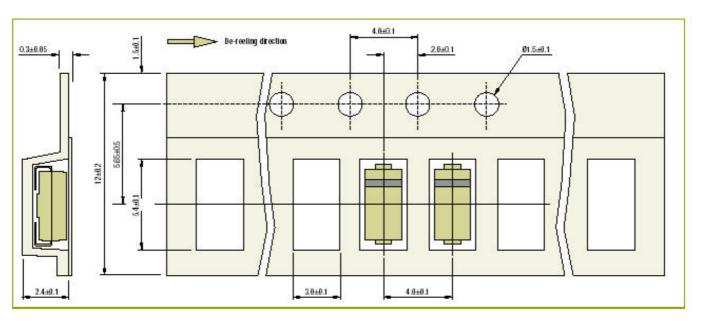


DIM	Min	Max	DIM	Min	Max
Α	4.06	4.57	E	1.70	2.31
В	2.18	2.79	F	0.89	1.50
С	1.29	1.70	G	0.102	0.203
D	0.152	0.305	Н	4.70	5.31

All Dimensions are in mm

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Standard Packing: 5K per Reel

Customer Notes ES1A - ES1J

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Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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