

SURFACE MOUNT SUPER FAST RECTIFIER

ES3A - ES3J

DO-214AB (SMC) Surface Mount Package



Polarity: Colour band denotes Cathode end

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating at 25°C Ambient Temperature unless specified otherwise. Single Phase, half wave 60Hz, Resistive or Inductive Load, for Capacitive Load current derate by 20%)

DESCRIPTION	SYMBOL	ES3A	ES3B	ES3C	ES3D	ES3E	ES3G	ES3J	UNIT
Maximum Peak Repetitive 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 at T _L =75°C	I _(AV)	3.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	100							A
Maximum Instantaneous Forward Voltage at I _F =3.0A	V _F	0.95				1.25		1.7	V
Maximum DC Reverse Current T _a =25°C at Rated DC Blocking Voltage T _a =100°C	I _R	5.0 100							μA
Maximum Reverse Recovery Time	*t _{rr}	35							ns
Typical Junction Capacitance	**C _J	45							pF
Thermal Resistance Junction to Ambient	***R _{th (j-a)}	TYP47							°C/W
Operating Junction and Storage Temperature Range	T _j , T _{stg}	- 65 to +150							°C

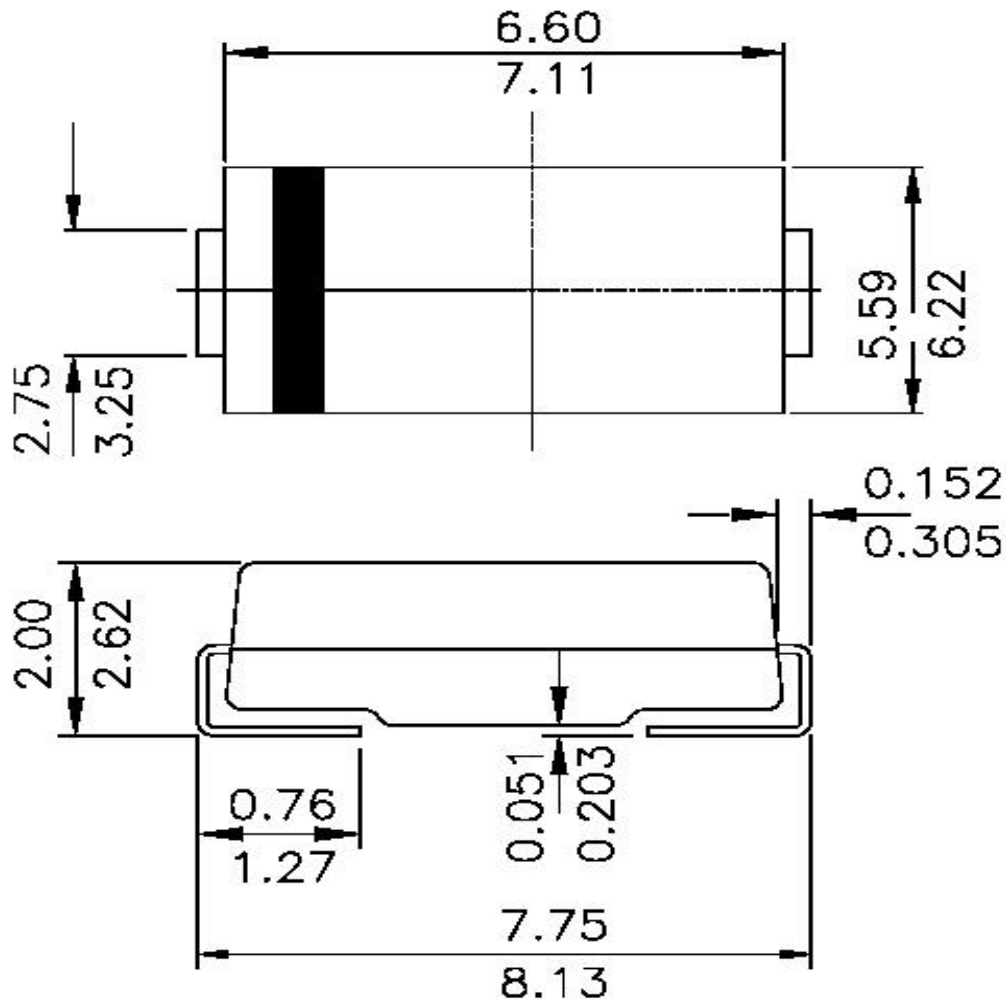
*Reverse recovery condition $I_F=0.5\text{A}$, $I_R=1\text{A}$, $t_{rr}=0.25\text{A}$

**Measured at 1MHz and applied reverse voltage of 4.0V D.C

*** Mounted on P.C.B with "0.2 x 0.2" (5 x 5mm) Copper Pad Areas

ES3A_3J Rev300310E

PACKAGE DO-214AB (SMC)



ALL DIMENSIONS ARE IN mm

PACKING:— 1.8K / REEL(7" 178mm)

PACKING:— 7.5K / REEL(13" 330mm)

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's 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 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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