

## 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 <sub>RRM</sub>	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current at T <sub>L</sub> =75°C	I <sub>(AV)</sub>	3.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	100							A
Maximum Instantaneous Forward Voltage at I <sub>F</sub> =3.0A	V <sub>F</sub>	0.95				1.25		1.7	V
Maximum DC Reverse Current    T <sub>a</sub> =25°C at Rated DC Blocking Voltage    T <sub>a</sub> =100°C	I <sub>R</sub>	5.0 100							μA
Maximum Reverse Recovery Time	*t <sub>rr</sub>	35							ns
Typical Junction Capacitance	**C <sub>J</sub>	45							pF
Thermal Resistance Junction to Ambient	***R <sub>th (j-a)</sub>	TYP47							°C/W
Operating Junction and Storage Temperature Range	T <sub>j</sub> , T <sub>stg</sub>	- 65 to +150							°C

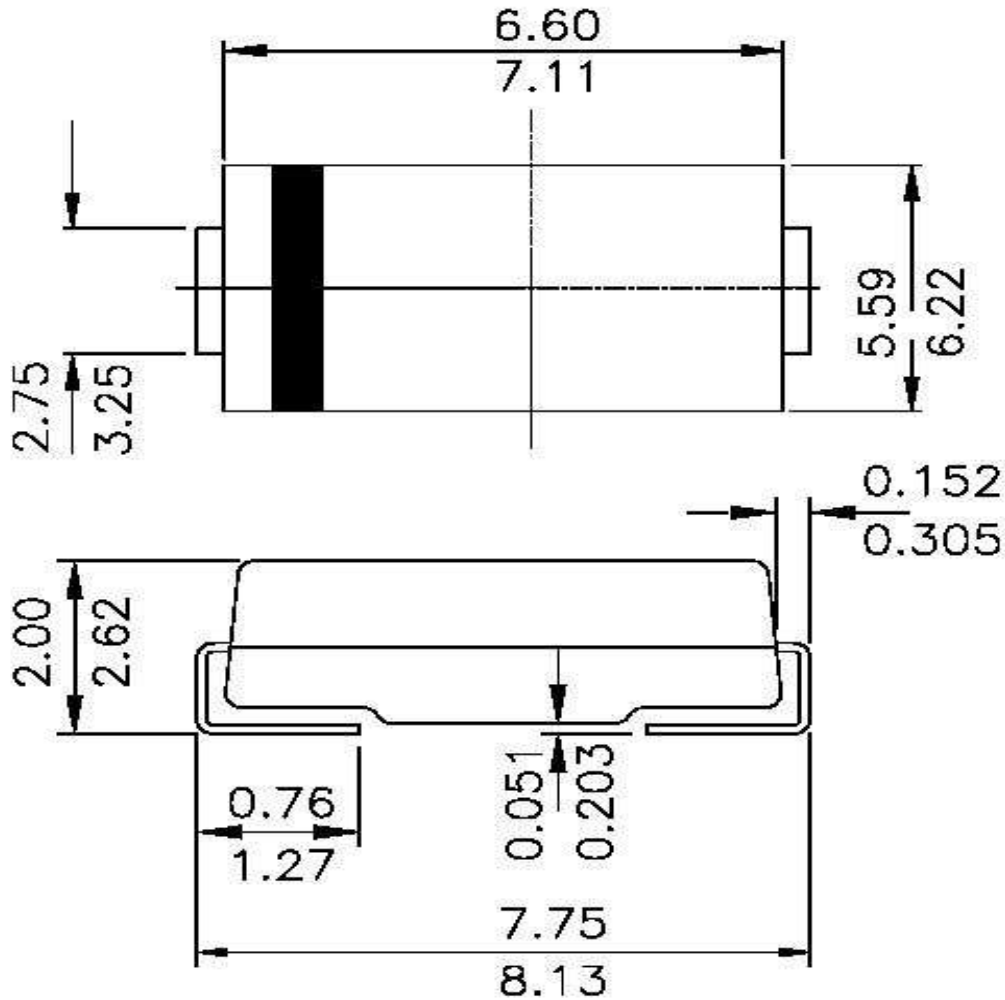
\*Reverse recovery condition  $I_F=0.5\text{A}$ ,  $I_R=1\text{A}$ ,  $t_{rr}=0.25\text{A}$

\*\*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).

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