

ES2A_J

SURFACE MOUNT ULTRAFAST EFFICIENT RECTIFIER

Features

- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-0
- Glass passivated chip junctions
- Ultrafast recovery times for high efficiency
- Low forward voltage, low power loss
- High temperature soldering guaranteed: 260°C/10

seconds on terminals

- RoHS Compliant Product

Mechanical Data

Case: JEDEC DO-214AA molded plastic body

Terminals: Solder plated, solderable per

MIL-STD-750, Method 2026

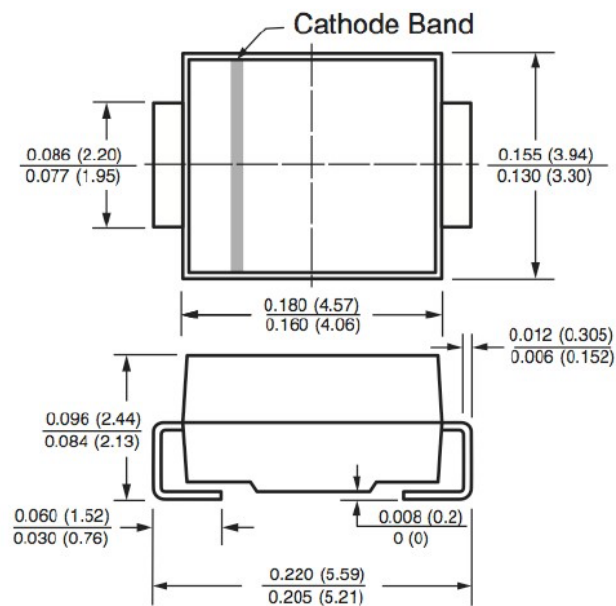
Polarity: Color band denotes cathode end

Weight: 0.096 gram

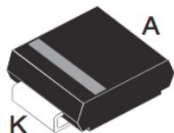
Packing & Order Information

3,000/Reel

DO-214AA (SMB)



Graphic symbol



RoHS
COMPLIANT

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		ES2A	ES2B	ES2D	ES2G	ES2J	Unit
V _{RRM}	Maximum repetitive peak reverse voltage	50	100	200	400	600	V
V _{RWS}	Maximum RMS voltage	35	70	140	280	420	V
V _{DC}	Maximum DC blocking voltage	50	100	200	400	600	V
I _{F(AV)}	Maximum average forward rectified current at TL=110°C	2					A
I _{FSM}	Peak forward surge current 8.3ms single half-sine-wave	30					A
V _F	Maximum instantaneous forward voltage at IFM=1.0A	0.95			1.3	1.7	V
I _R	Maximum DC reverse current TJ=25°C At rated DC blocking voltage TA=100°C	10 200					uA

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Ratings at 25°C ambient temperature unless otherwise specified

		ES2A	ES2B	ES2D	ES2G	ES2J	Unit
T _{rr}	Maximum reverse recovery time	30				50	nS
C _j	Typical junction capacitance	25				19	PF
R _{θJA}	Maximum thermal resistance	75				°C/W	
R _{θJL}		25				°C/W	
T _{STG}	Storage temperature range	-55 to +150				°C	
T _j	Junction Temperature	150				°C	

NOTE:

1. Pluse test: Pulse width 300us, duty cycle 1%

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■ Ratings and Characteristic Curves

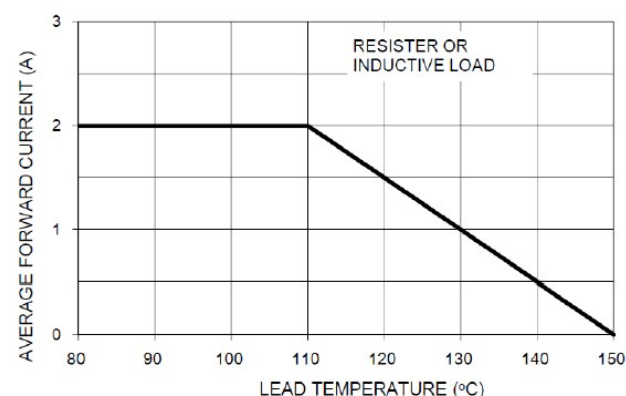


FIG.1-FORWARD DERATING CURVE

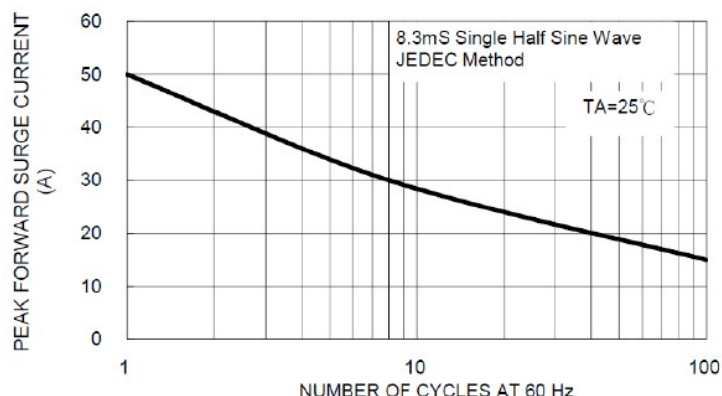


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

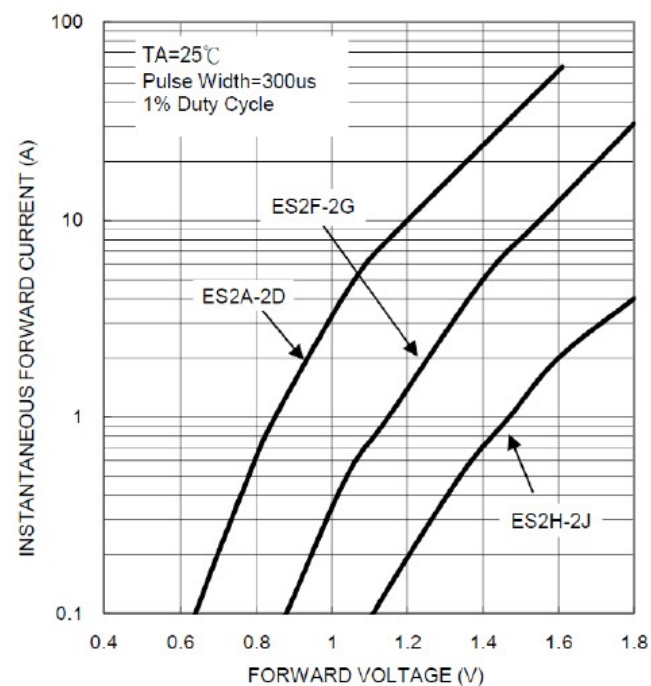


FIG.3-TYPICAL FORWARD CHARACTERISTICS

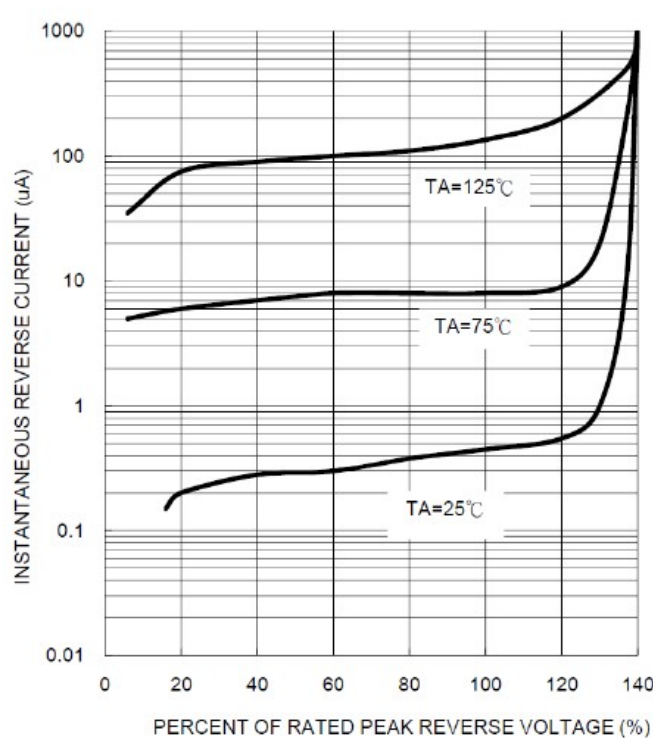


FIG.4-TYPICAL REVERSE CHARACTERISTICS

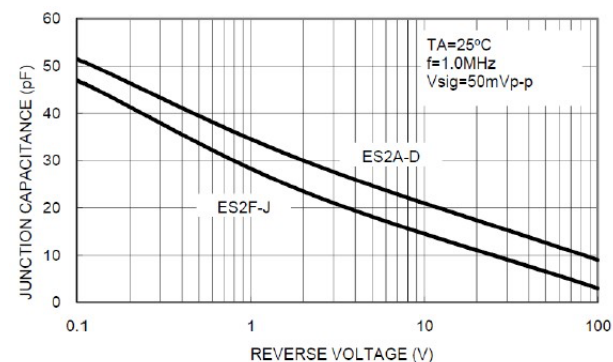


FIG.5-TYPICAL JUNCTION CAPACITANCE

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