

ES3A THUR ES3J

ES3A THUR ES3J Super-Fast Surface Mount Rectifiers

General description

Super Fast Surface Mount Rectifiers
Reverse Voltage : 50 to 600V
Forward Current:3.0A
SMB/DO214AA package

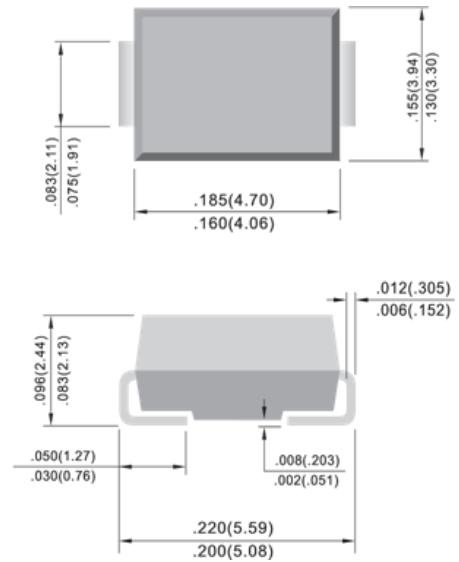
FEATURES

- Low profile package
- Built-in strain relief
- Easy pick and place
- Superfast recovery times for high efficiency.
- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-O

MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750 ,Method 2026
- Polarity: Indicated by cathode band.
- Weight: 0.003 ounce, 0.093 gram

SMB/DO-214AA



Unit: inch (mm)

Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

Characteristic	Symbol	ES3A	ES3B	ES3C	ES3D	ES3E	ES3G	ES3J	Unit	
Peak Repetitive Reverse Voltage	V _{RRM}									
Working Peak Reverse Voltage	V _{RWM}	50	100	150	200	300	400	600	V	
DC Blocking Voltage	V _R									
RMS Reverse Voltage	V _{R(RMS)}	35	70	105	140	210	280	420	V	
Average Rectified Output Current @T _L = 75°C	I _o	3.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	80								A
Forward Voltage @I _F = 3.0A	V _{FM}	0.95				1.25		1.7	V	
Peak Reverse Current @T _A = 25°C	I _{RM}	5.0							μA	
At Rated DC Blocking Voltage @T _A = 100°C		200								
Reverse Recovery Time (Note 1)	t _{rr}	35							nS	
Typical Junction Capacitance (Note 2)	C _j	20							pF	
Typical Thermal Resistance (Note 3)	R _{JL}	34							°C/W	
Operating and Storage Temperature Range	T _j , T _{STG}	-55 to +150							°C	

Note: 1.Pulse Test with PW=300usec,1%Duty Cycle.

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

3.Thermal Resistance from Junction to leadmounted on P.C.B. with 0.3" x 0.3" (8.0 mm x 8.0 mm) copper



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RATING AND CHARACTERISTIC CURVES

FIG.1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

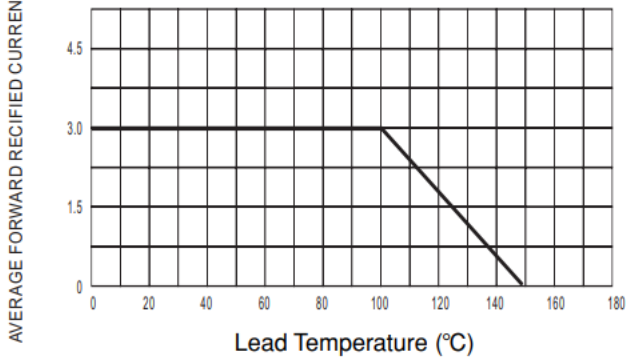


FIG.2 TYPICAL FORWARD CHARACTERISTICS

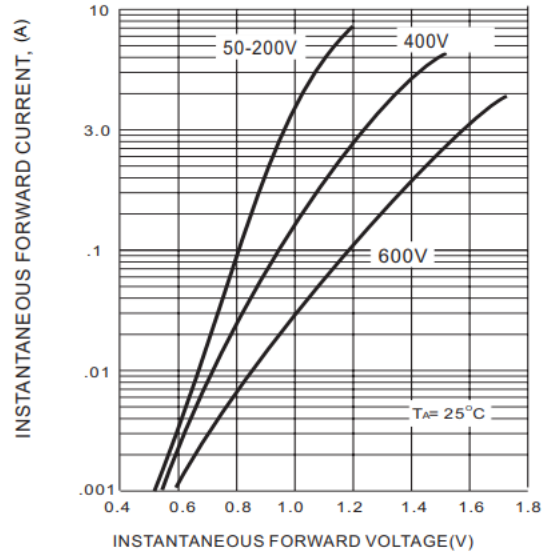


FIG.3 MAXIMUM NON-REPEITIVE SURGE CURRENT

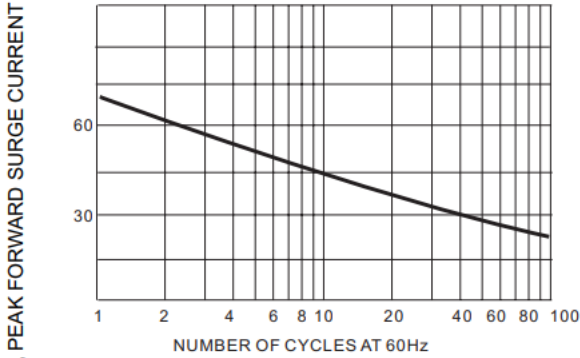


FIG.4 TYPICAL JUNCTION CAPACITANCE

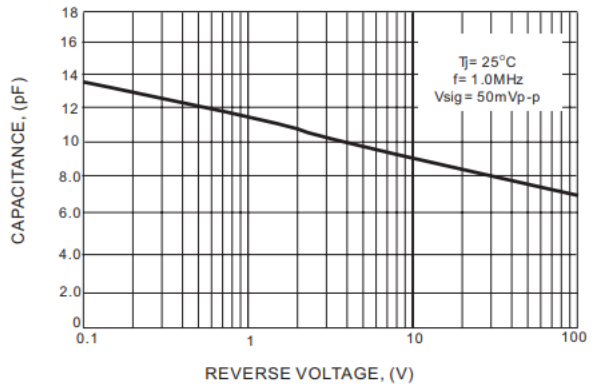


FIG.5 TYPICAL REVERSE CHARACTERISTICS

