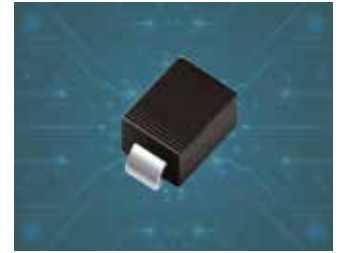


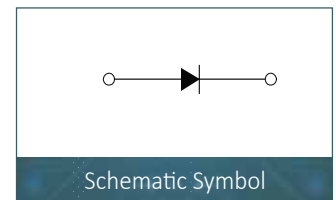
1. FEATURES

- Glass Passivated Die Construction
- Superfast reverse recovery time
- Low reverse leakage
- Ideally Suited for Automatic Assembly
- Lead Free Finish/RoHS Compliant



2. MECHANICAL DATA

- Case: DO-214AA(SMB)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Polarity: As marked
- Weight: SMB 0.09 grams (approximate)



3. MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A = 25°C)

PARAMETER	SYMBOL	ES3AB	ES3BB	ES3CB	ES3DB	ES3FB	ES3GB	ES3JB	UNIT
Device marking code		ES3AB	ES3BB	ES3CB	ES3DB	ES3FB	ES3GB	ES3JB	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V _{R(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	I _{F(AV)}	3							A
Surge peak forward current, 8.3ms single half sine-wave superimposed on rated load per diode	I _{FSM}	100							A
Storage temperature	T _{STG}	-55~+150							°C
Junction temperature	T _J	-55~+150							°C
Typical Junction-to-lead thermal resistance per diode	R _{BJ-L}	24							°C/W
Typical Junction-to-ambient thermal resistance per diode	R _{BJ-A}	84							°C/W
Maximum forward voltage @I _F =3A, T _J =25°C(Note1)	V _F	1.0				1.13		1.45	V
Maximum reverse current @rated V _R per diode (Note2)	T _J =25°C	10							uA
	T _J =125°C	100							
Maximum reverse recovery time @I _F =0.5A, I _R =1.0A, I _{RR} =0.25A	t _{rr}	35							nS

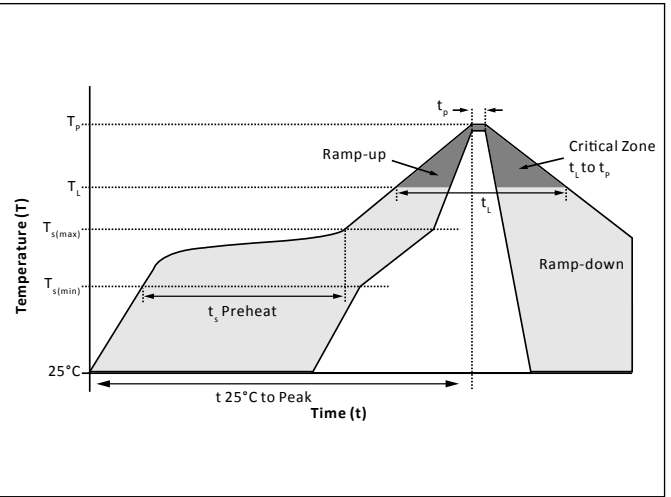
Note 1: Pulse test with PW=0.3mS

Note 2: Pulse test with PW=30mS



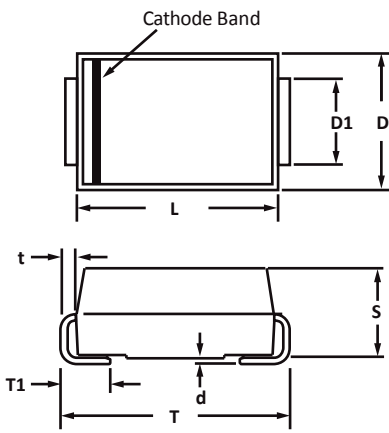
4. SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		280°C



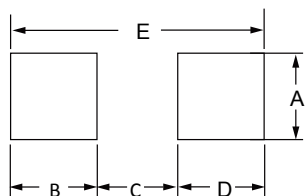
5. DO-214AA(SMB) PACKAGE DIMENSIONS

Item	Millimeters		Inches	
	Min.	Max.	Min.	Max.
L	4.30	4.85	0.169	0.191
D	3.30	3.94	0.130	0.155
D1	1.70	2.30	0.067	0.091
T	5.10	5.70	0.201	0.224
T1	0.80	1.40	0.031	0.055
d	-	0.30	-	0.012
S	2.00	2.40	0.079	0.103
t	0.80	1.00	0.031	0.039



6. RECOMMENDED PAD LAYOUT DIMENSIONS

Item	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.10	-	0.087	-
B	1.45	-	0.057	-
C	-	2.55	-	0.100
D	1.45	-	0.057	-
E	5.60 REF		0.220 REF	



7. ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
ES3AB-ES3JB	DO-214AA(SMB)	3000PCS	13"



CONTACT US

Headquarters

No.3387 Shendu Road Pujiang I&E Park Minhang Shanghai China

Hotline

400-021-5756

Web

[Http://www.semiware.com](http://www.semiware.com)

By Telephone

General:86-21-3463-7172

Sales:86-21-3463-7345

Technical Support:86-21-3463-7654

By Fax

General:86-21-3965-0654

Sales:86-21-3463-7458

By Email

General:china@semiware.com

Sales:sales@semiware.com

Technical Support:fae@semiware.com

By QR Code



Website



Wechat

COPYRIGHT©Semiware 2009-This literature is subject to all applicable copyright laws and is not for resale in any manner.

SPECIFICATIONS:Semiware reserves the right to change the electrical and or mechanical characteristics described here in without notice.

DESIGN CHANGES:Semiware reserves the right to discontinue product lines without notice and that the final judgement concerning selection and specifications is the buyer's and that in furnishing engineering and technical assistance.Semiware assumes no responsibility with respect to the selection or specifications of such products.Semiware makes no warranty,representation or guarantee regarding the suitability of its products for any particular prupose,nor does Semiware assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability without limitation special,consequential or incidental damages.

LIFE SUPPORT POLITY:Semiware products are not authorized for use in life support systems without written consent from the factory.

