



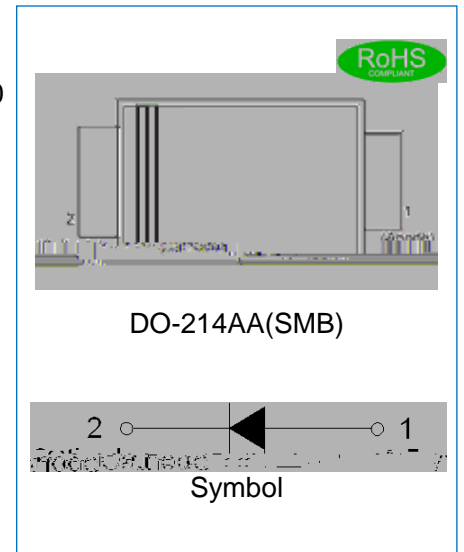
ES2A~ES2J

SUPER FAST RECOVERY RECTIFIER

Rev.2.4

DESCRIPTION:

- Plastic package has underwriters laboratory flammability classification 94V-0
- For surface mounted applications in order to optimize board space
- Glass passivated chip junction
- Lead free in comply with EU RoHS 2011/65/EU directives
- Superfast recovery time



MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic
- Terminals: Solder plated, solderable per J-STD-002
- Polarity: Color band denotes cathode end
- Weight: 0.1 gram

ABSOLUTE MAXIMUM RATING AND ELECTRICAL CHARACTERISTICS

(Rating at 25 °C ambient temperature unless otherwise specified.)

Parameter	Symbol	ES2A	ES2B	ES2D	ES2G	ES2J	Unit	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	V	
Maximum RMS voltage	V_{RMS}							
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50						A
Maximum forward voltage @ $I_F=2.0A$	V_F	0.95			1.3	1.7	V	
Maximum DC reverse current at rated DC blocking voltage	$T_j=25$	5.0					μA	
	$T_j=150$	300						
Typical junction capacitance $V_R=4.0V, f=1MHz$	C_J	30			16		pF	
Operating junction and storage temperature range	T_j, T_{stg}	-55 to +150						
Maximum reverse recovery time $I_F=0.5A, I_R=1A, I_{rr}=0.25A$	t_{rr}	35					ns	

THERMAL RESISTANCES

Symbol	Parameter	ES2A	ES2B	ES2D	ES2G	ES2J	Unit
$R_{th(j-L)}$	Junction to lead (note1)	18					/W

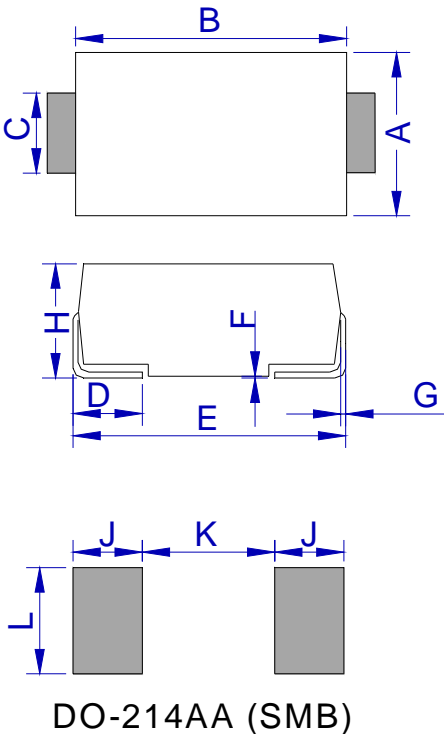
Note1 Thermal resistance from junction to lead mounted on P.C.B. with 4.0 mm x 4.0 mm copper pad areas.

MARKING



E	Super Fast Recovery Rectifier					
S	Surface Mount					
2	$I_{F(AV)}=2.0A$					
J	$V_{RRM}:600V$					
<u>x</u> H1	Month	1	2	3	9	A B C
3 <u>x</u> 1						
2018	2019	2020	2021	2022	2023	2024
H	I	J	K	L	M	N
2025	2026	2027	2028	2029	2030	...
O	P	Q	R	S	T	...
3H <u>x</u>	Batch number					

PACKAGE MECHANICAL DATA



Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	3.30	3.94	0.130	0.155
B	4.30	4.80	0.169	0.189
C	1.90	2.20	0.075	0.087
D	0.95	1.52	0.037	0.060
E	5.20	5.60	0.205	0.220
F	0.051	0.203	0.002	0.008
G	0.15	0.31	0.006	0.012
H	2.10	2.40	0.083	0.094
J	2.20		0.087	
K		2.60		0.102
L	2.30		0.091	

TAPE AND REEL SPECIFICATION-SMB



CHARACTERISTICS CURVE

FIG.1: Typical forward characteristics (25) FIG.2: Typical reverse characteristics

