WEITRON

ES2A Thru ES2J

Surface Mount Super Fast Rectifiers

Lead(Pb)-Free

REVERSE VOLTAGE
50 TO 600 VOLTS
FORWARD CURRENT
2.0 AMPERE

Features:

* For Surface Mount Application
* Low Reverse Current
* High Current Capability

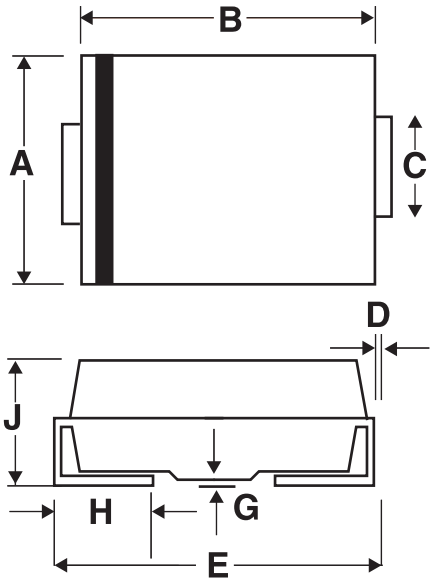
SMB(DO-214AA)

Mechanical Data:

* Case : Molded Plastic
* Terminals : Solder Plated Terminal-Solderable per MIL-STD-202, Method 208
* Polarity : Indicated by cathode band
* Weight : 0.093 grams

SMB Outline Dimension

Unit:mm



SMB		
Dim	**Min**	**Max**
A	3.30	3.94
B	4.06	4.80
C	1.96	2.21
D	0.15	0.31
E	5.00	5.59
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62

Maximum Ratings and Electrical Characteristics

Rating 25°C Ambient Temperature Unless Otherwise Specified.
Single Phase Half Wave, 60Hz , Resistive or Inductive Load.
For Capacitive Load, Derate Current by 20%.

Characteristics	Symbol	ES2A	ES2B	ES2C	ES2D	ES2F	ES2G	ES2J	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	420	
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	
Maximum Average Forward Rectifier Current	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50							A
Maximum Instantaneous At 2.0A DC	V_F	0.98				1.30		1.75	V
Maximum DC Reverse Current @T_A=25°C At Rated DC Blocking Voltage @T_A=100°C	I_R	5.0 100							μA
Maximun Reverse Recocery Time (Note2)	T_{rr}	35							ns
Typical Junction Capacitance (Note1)	C_J	40				25			pF
Typical Thermal Resistance	$R_{\theta JC}$	30							°C/W
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

NOTE 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2.Measured with I_F=0.5A, I_R=1A, I_{RR}=0.25A.