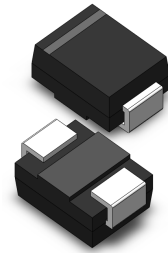


VOLTAGE RANGE: 300V
CURRENT: 2.0 A

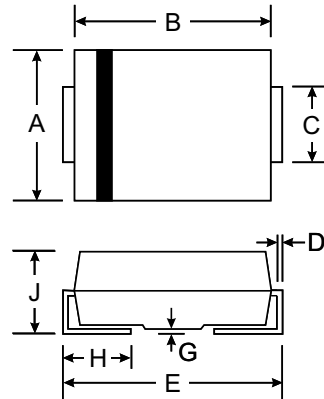


Features

- For surface mount applications
- Low profile package
- Easy pick and place
- Glass passivated chip junction
- Superfast recovery times for high efficiency
- Low power loss, high efficiency
- High temperature soldering:
250°C/10 seconds at terminals

Mechanical Data

- Case: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)



SMB(DO-214AA)		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.70
C	1.91	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
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	ES2F	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	300	Volts
Working peak reverse voltage	V _{RWM}	225	Volts
Maximum RMS voltage	V _{RMS}	210	Volts
Maximum DC blocking voltage	V _{DC}	300	Volts
Maximum average forward rectified current at T _L =110°C	I _(AV)	2.0	Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) at T _L =110°C	I _{FSM}	50	Amps
Maximum instantaneous forward voltage at 2.0A	V _F	1.10	Volts
Maximum DC reverse current at working peak reverse voltage	I _R	10 200	μA
			<small>T_A=25°C T_A=100°C</small>
Maximum reverse recovery time (NOTE 1)	t _{rr}	35	ns
Maximum reverse recovery time (NOTE 2)	t _{rr}	50	ns
Maximum reverse recovery current (NOTE 2)	I _{RM}	3.0	Amps
Maximum stored charge (NOTE 2)	Q _{rr}	50	nC
Typical junction capacitance (NOTE 3)	C _J	15	pF
Typical thermal resistance (NOTE 4)	R _{θJA} R _{θJL}	75 25	°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150	°C

NOTES:

- (1) Reverse recovery test conditions: I_F=0.5A, I_R= 1.0A, I_{rr}=0.25A
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (3) Measured at I_F=1.0A, di/dt=100A/μs, V_R=30V, I_{rr}=0.1I_{RM}
- (4) Units mounted on P.C.B. 5.0 x 5.0mm (0.013mm thick) land areas

RATING AND CHARACTERISTIC CURVES ES2F

FIG. 1 - MAXIMUM FORWARD CURRENT DERATING CURVE

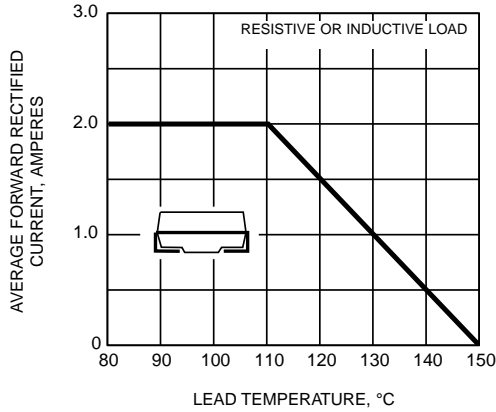


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

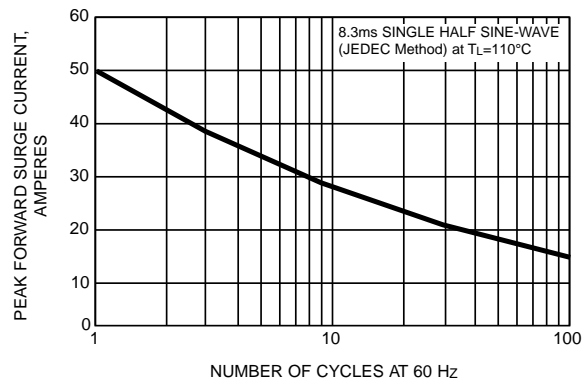


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER LEG

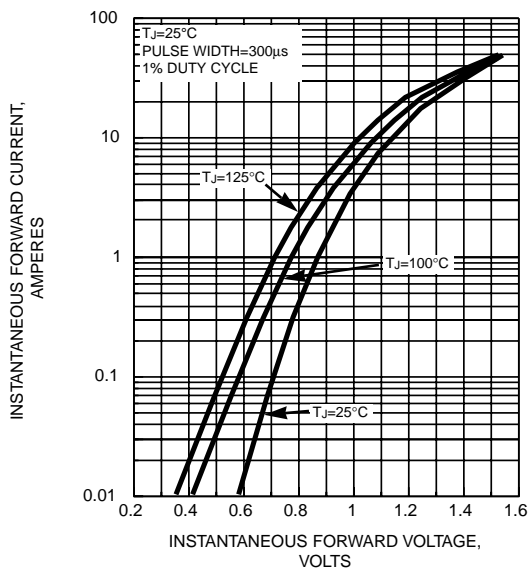


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG

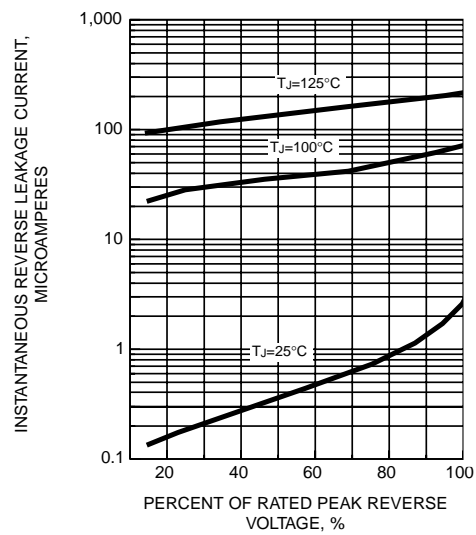


FIG. 5 - REVERSE SWITCHING CHARACTERISTICS PER LEG

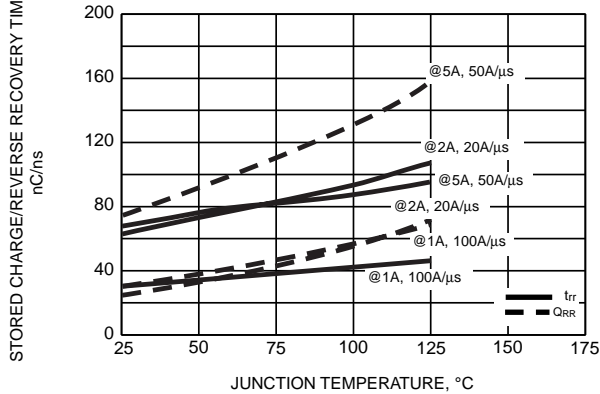


FIG. 6 - TYPICAL JUNCTION CAPACITANCE PER LEG

