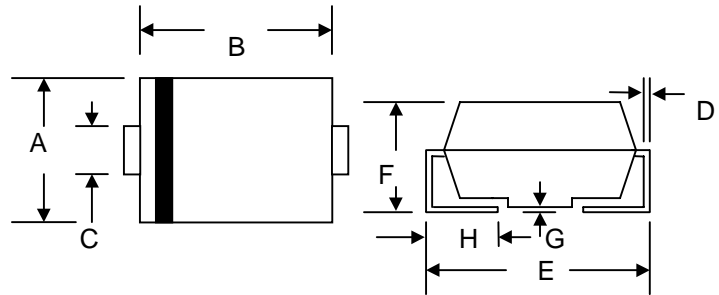


1.0A SURFACE MOUNT SUPER FAST RECTIFIER

Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Surge Overload Rating to 30A Peak
- Low Power Loss
- Super-Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O



Mechanical Data

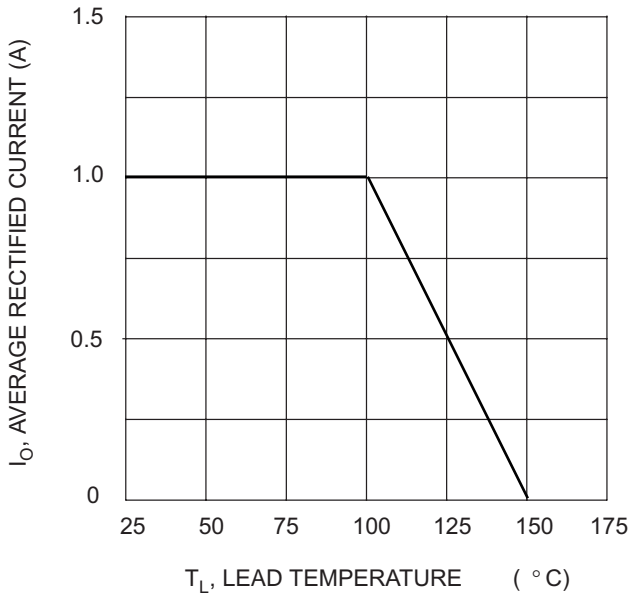
- Case: Low Profile Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)

SMB/DO-214AA		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.70
C	1.91	2.11
D	0.152	0.305
E	5.08	5.59
F	2.13	2.44
G	0.051	0.203
H	0.76	1.27
All Dimensions in mm		

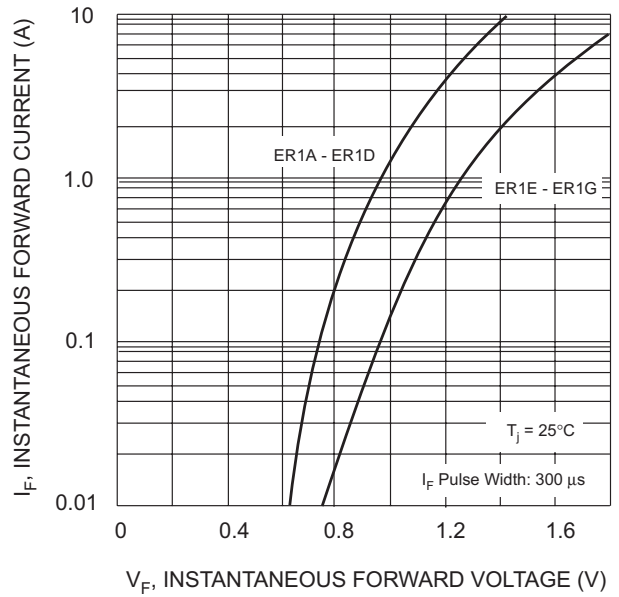
Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Characteristic	Symbol	ER1A	ER1B	ER1C	ER1D	ER1E	ER1G	Unit
Peak Repetitive Reverse Voltage	V _{RRM}							
Working Peak Reverse Voltage	V _{RWM}	50	100	150	200	300	400	V
DC Blocking Voltage	V _R							
RMS Reverse Voltage	V _{R(RMS)}	35	70	105	140	210	280	V
Average Rectified Output Current @T _L = 100°C	I _O	1.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30						A
Forward Voltage @I _F = 1.0A	V _{FM}	0.95				1.25		V
Peak Reverse Current @T _A = 25°C	I _{RM}	5.0						μA
At Rated DC Blocking Voltage @T _A = 100°C		500						
Reverse Recovery Time (Note 1)	t _{rr}	35						nS
Typical Junction Capacitance (Note 2)	C _j	10						pF
Typical Thermal Resistance (Note 3)	R _{θJL}	34						K/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150						°C

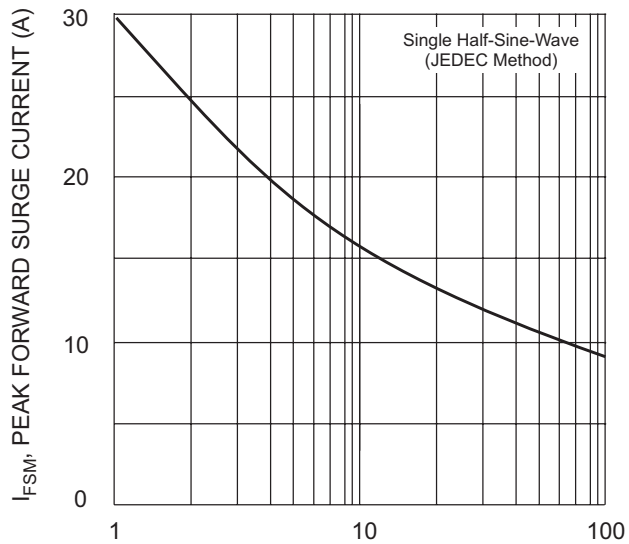
Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A,
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
 3. Mounted on P.C. Board with 8.0mm² land area.



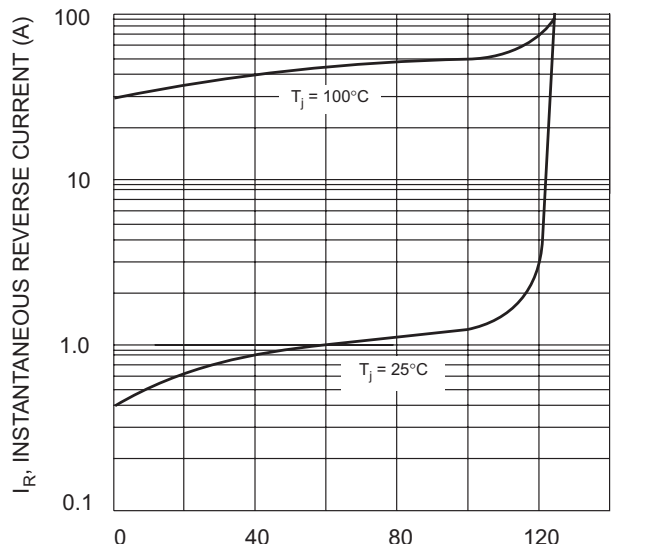
T_L , LEAD TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



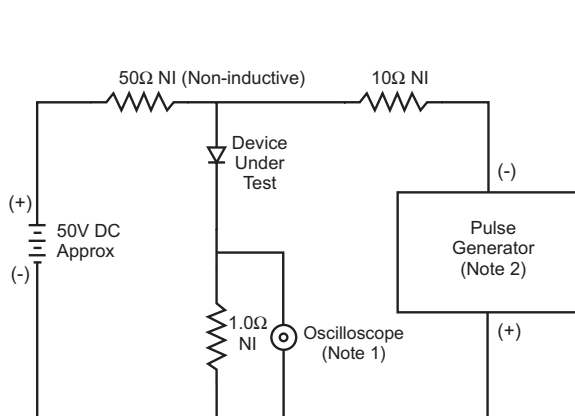
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Surge Current Derating Curve



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 4 Typical Reverse Characteristics



- Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
 2. Rise Time = 10ns max. Input Impedance = 50Ω.

Fig. 5 Reverse Recovery Time Characteristic and Test Circuit