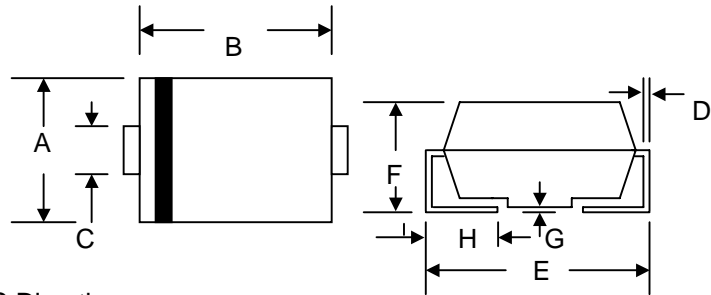


**Features**

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Surge Overload Rating to 50A Peak
- Low Power Loss
- Ultra-Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O
- Green Products in Compliance with the RoHS Directive



**Mechanical Data**

- Case: 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	Min	Max
A	3.30	3.94	0.130	0.155
B	4.06	4.70	0.160	0.185
C	1.91	2.11	0.075	0.083
D	0.152	0.305	0.006	0.012
E	5.08	5.59	0.2	0.220
F	2.13	2.44	0.084	0.096
G	0.051	0.203	0.002	0.008
H	0.76	1.27	0.029	0.05
	in mm		In inch	

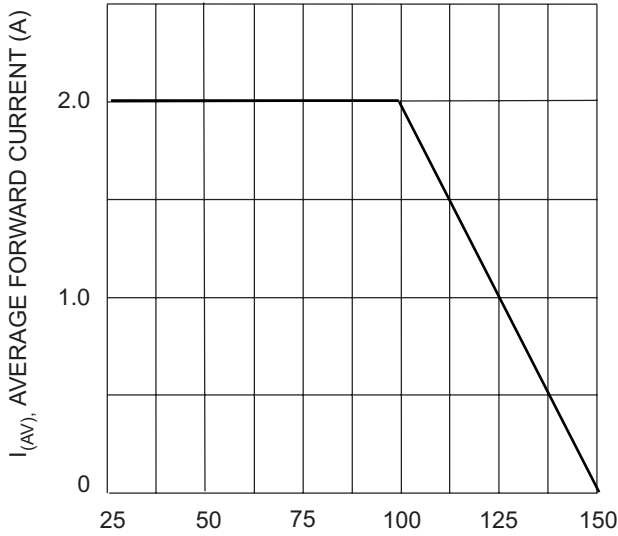
**Maximum Ratings and Electrical Characteristics** @ $T_A=25^{\circ}\text{C}$  unless otherwise specified

Characteristic	Symbol	UF2A-G	UF2B-G	UF2D-G	UF2G-G	UF2J-G	UF2K-G	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	V
Working Peak Reverse Voltage	$V_{RWM}$							
DC Blocking Voltage	$V_R$							
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	V
Average Rectified Output Current @ $T_L = 90^{\circ}\text{C}$	$I_o$	2.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) @ $T_A = 55^{\circ}\text{C}$	$I_{FSM}$	50						A
Forward Voltage @ $I_F = 2.0\text{A}$	$V_{FM}$	1.0		1.4		1.7		V
Peak Reverse Current @ $T_A = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^{\circ}\text{C}$	$I_{RM}$	10 500						$\mu\text{A}$
Reverse Recovery Time (Note 1)	$t_{rr}$	50				100		nS
Typical Junction Capacitance (Note 2)	$C_j$	50						pF
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$	20						K/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-50 to +150						$^{\circ}\text{C}$

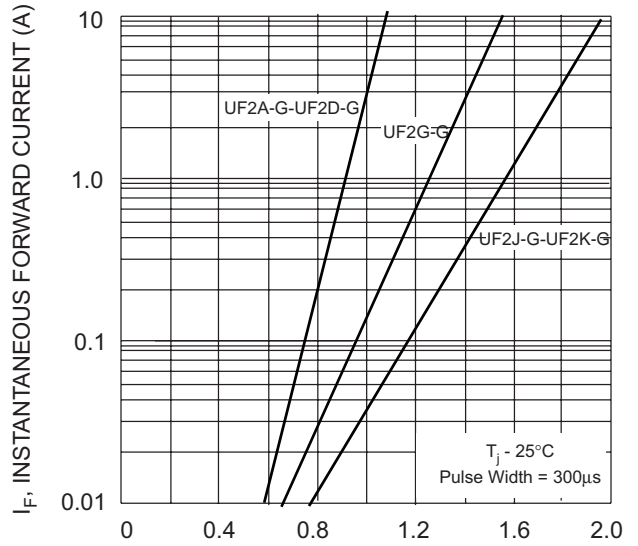
Note: 1. Measured with  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{rr} = 0.25\text{A}$ ,  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.  
 3. Mounted on P.C. Board with  $8.0\text{mm}^2$  land area.

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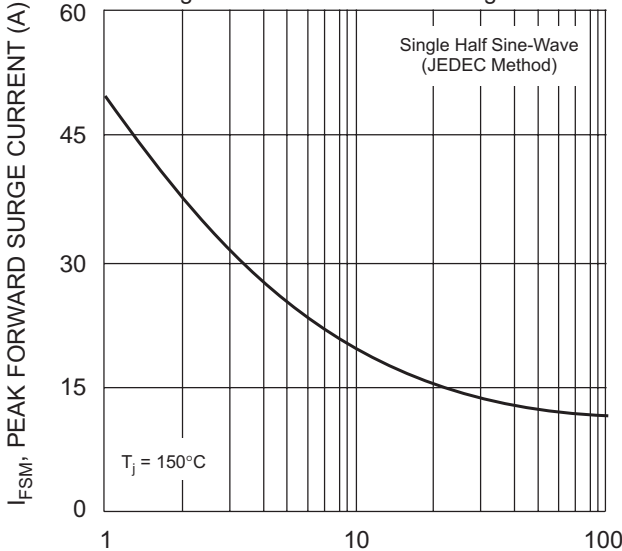
**Green Products**



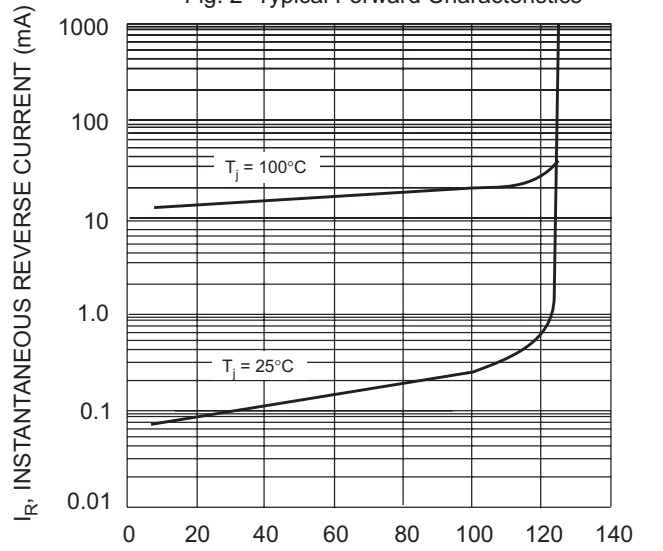
$T_L$ , LEAD TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve



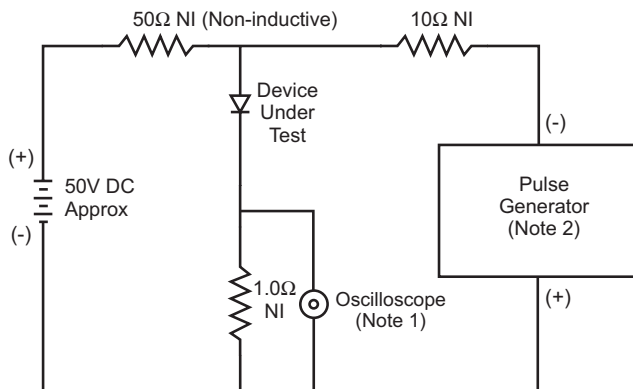
$I_F$ , INSTANTANEOUS FORWARD CURRENT (A)  
 $V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics



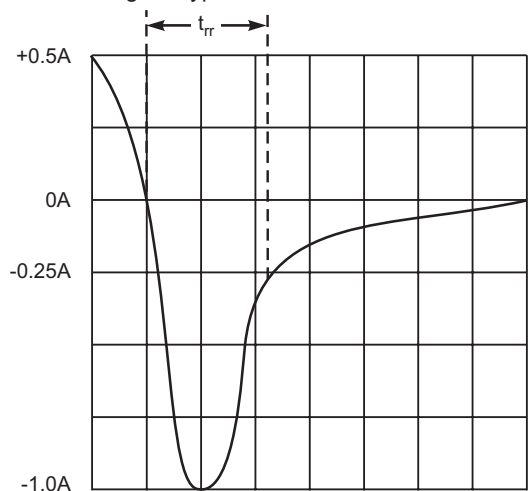
$I_{FSM}$ , PEAK FORWARD SURGE CURRENT (A)  
NUMBER OF CYCLES AT 60Hz  
Fig. 3 Forward Surge Current Derating Curve



$I_R$ , INSTANTANEOUS REVERSE CURRENT (mA)  
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.



Set time base for 10ns/cm

Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

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