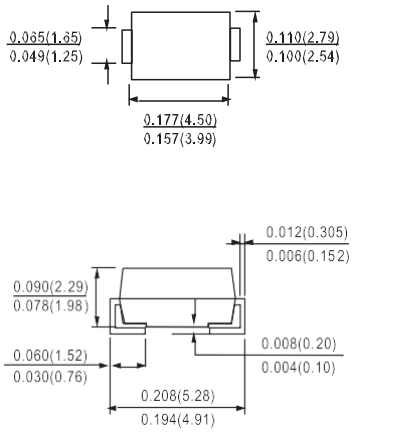
Surface Mount Schottky Barrier Rectifiers

Features

- Glass Passivated Die Construction
- Diffused Junction
- Ultra-Fast Recovery Time for High Efficiency
- Low Forward Voltage Drop, High Current Capability, and Low Power Loss
- Surge Overload Rating to 30A Peak
- Ideally Suited for Automated Assembly
- Plastic Material: UL Flammability Classification Rating 94V-0

DO-214AC(SMA)



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Molded Plastic
- Terminals: Solder Plated Terminal - Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)
- Mounting Position: Any

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	US1J	US1M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	600	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	420	700	V
Average Rectified Output Current @ T_T = 75°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 Drop @ I_F = 1.0A	V_{FM}	1.7		V
Peak Reverse Current @ T_A = 25°C at Rated DC Blocking Voltage @ T_A = 100°C	I_{RM}	5.0 100		μA
Reverse Recovery Time (Note 2)	t_{rr}	75		ns
Typical Junction Capacitance (Note 1)	C_j	10		pF
Typical Thermal Resistance, Junction to Terminal	$R_{\theta JT}$	30		°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150		°C

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

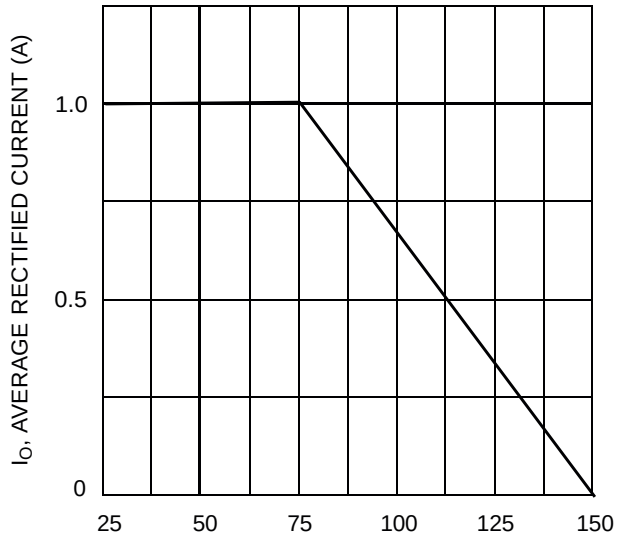


Fig. 1 Forward Current Derating Curve

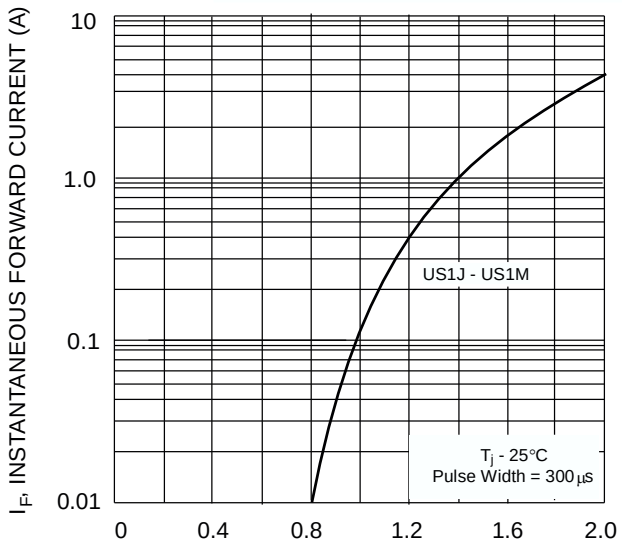


Fig. 2 Typical Forward Characteristics

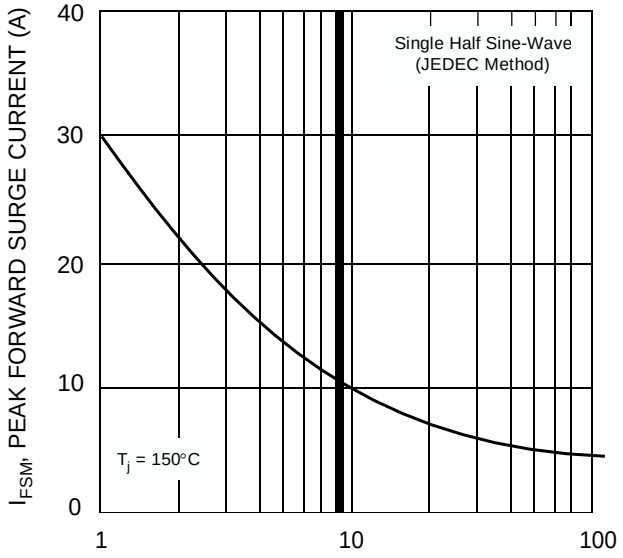


Fig. 3 Forward Surge Current Derating Curve

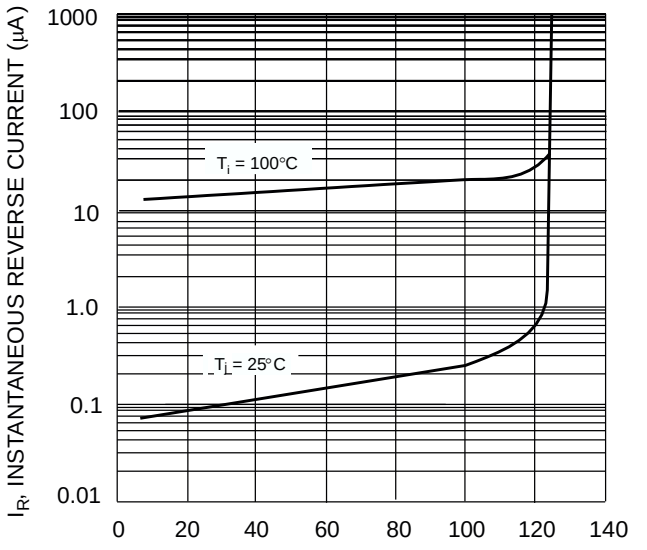
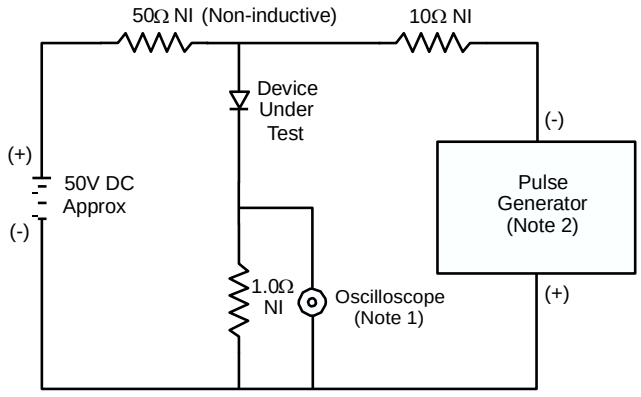
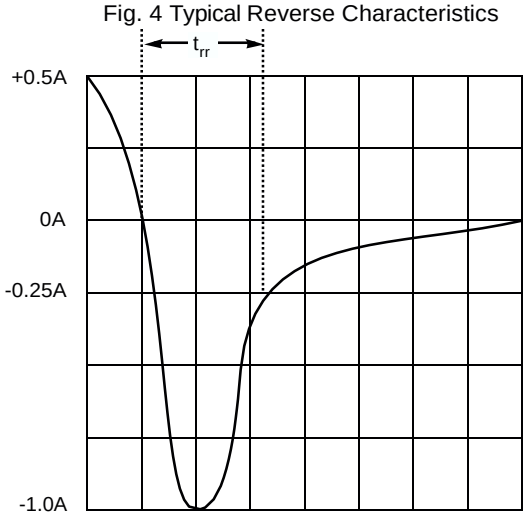


Fig. 4 Typical Reverse Characteristics



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



Set time base for 50/100 ns/cm

V 1.0