

FEATURES

- Glass Passivated Die Construction
- Super-Fast Recovery Time For High Efficiency
- Low Forward Voltage Drop and High Current Capability
- Ideally Suited for Automated Assembly
- Plastic Material: UL Flammability Classification Rating 94V-0



DO-214AB (SMC)

MECHANICAL DATA

- Case: DO-214AB Molded plastic
- Terminals: Pure tin plated, lead free
- Polarity: Indicated by cathode band
- Weight: 250mg (approx.)



Cathode

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	UF3A	UF3B	UF3D	UF3G	UF3J	UF3K	UF3M	Unit	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current at $T_A = 75\text{ }^\circ\text{C}$	$I_{F(AV)}$	3.0							A	
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC)	I_{FSM}	100.0							A	
Maximum Instantaneous Forward Voltage at 3 A	V_F	1.0		1.4		1.7			V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A = 25\text{ }^\circ\text{C}$							5.0	μA
		$T_A = 100\text{ }^\circ\text{C}$							50.0	
Maximum reverse recovery time (NOTE1)	t_{rr}	50				100				nS
Typical Junction Capacitance (NOTE2)	C_J	75				63				pF
Maximum Thermal Resistance (NOTE3)	$R_{\theta JL}$	47.0							$^\circ\text{C/W}$	
Operating and Storage Temperature Range	$T_{J, TS}$	-50 to + 150							$^\circ\text{C}$	

Note: 1.Reverse recovery condition $I_F=0.5\text{A}, I_R=1.0\text{A}, I_{rr}=0.25\text{A}$

2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

Typical Characteristics



