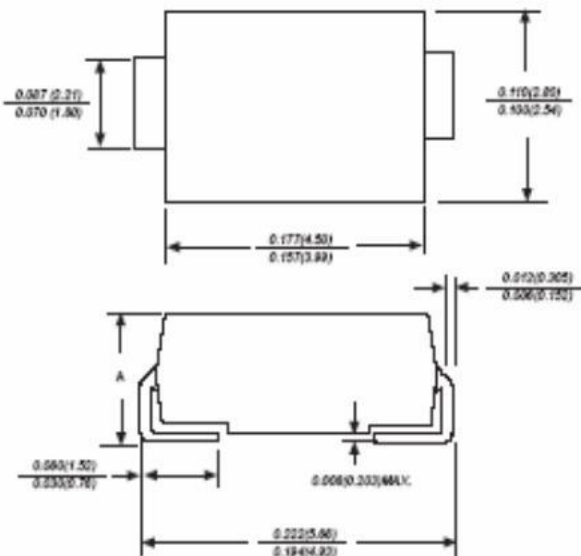


SURFACE MOUNT ULTRA FAST RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

DO-214AC(SMA)



	SMA	SMA(H)
A:	0.066(2.42) 0.070(1.78)	0.122(3.12) 0.110(2.82)

Dimensions in inches and (millimeters)

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Ultra fast switching for high efficiency
- ◆ Low reverse leakage
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed 250°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic body
 Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
 Polarity: Color band denotes cathode end
 Mounting Position: Any
 Weight: 0.003 ounce, 0.093 grams
 0.004 ounce, 0.111 grams SMA(H)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	US1A	US1B	US1D	US1G	US1J	US1K	US1M	UNITS	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	VOLTS	
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	VOLTS	
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	VOLTS	
Maximum average forward rectified current at T _L =55°C	I _(AV)	1.0							Amp	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30.0							Amps	
Maximum instantaneous forward voltage at 1.0A	V _F	1.0		1.4		1.7			Volts	
Maximum DC reverse current at rated DC blocking voltage	I _R	5.0 50.0							nA	
Maximum reverse recovery time (NOTE 1)	t _{rr}	50				75				ns
Typical junction capacitance (NOTE 2)	C _J	15.0							pF	
Typical thermal resistance (NOTE 3)	R _{qJA}	50.0							°C/W	
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +150							°C	

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

RATINGS AND CHARACTERISTIC CURVES US1A THRU US1M

