

US1A THRU US1M

ULTRA FAST RECOVERY GLASS PASSIVATED RECTIFIERS

FEATURES:

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Glass passivated chip junctions
- Low profile package
- Easy pick and place
- Ultrafast recovery times for high efficiency
- Low forward voltage, low power loss
- Built-in strain relief, ideal for automated placement
- High temperature soldering guaranteed : 250° C/10 seconds at terminals

MECHANICAL DATA

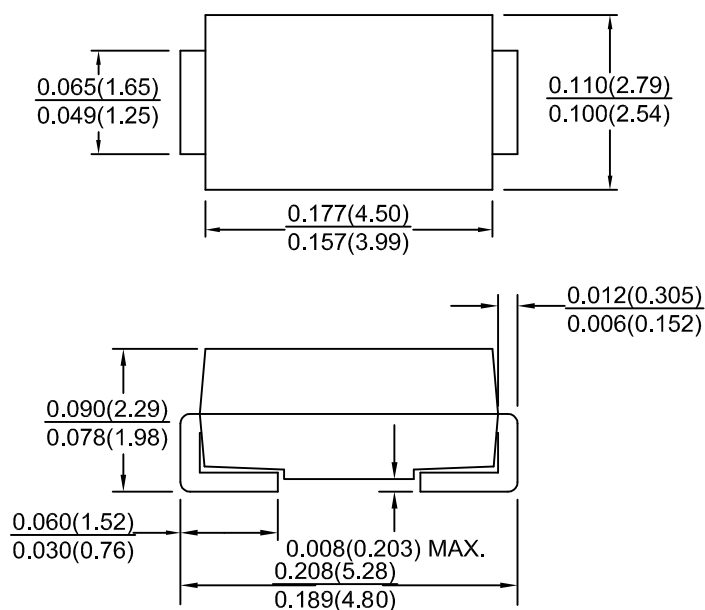
Case : JEDEC DO-214AC molded plastic body over passivated chip

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Color band denotes cathode end

Weight : 0.002 ounce, 0.064 gram

SMA/DO-214AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25° C ambient temperature unless otherwise specified.

Characteristic	Symbol	US1A	US1B	US1D	US1G	US1J	US1K	US1M	Units
Maximum recurrent peak reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	VDC	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 1.0 A	V _F	1.0		1.4		1.7		Volts	
Maximum DC reverse current at rated DC blocking voltage	I _R	Ta=25° C		5.0		Ta=100° C		50.0	μ A
Maximum reverse recovery time (NOTE 1)	t _{rr}	50.0				75.0			nS
Typical junction capacitance (NOTE 2)	C _J	17.0				15.0			pF
Maximum thermal resistance (NOTE 3)	R _{th-JA} R _{th-JL}	75.0				27.0			° C/W
Operating and storage temperature range	T _J , T _{stg}	-65 to +150							° C

NOTES:

- (1) Reverse recovery test condition : 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 Volts
- (3) P.C.B. mounted on 0.2x0.2"(5.0x5.0mm) copper pad area

RATINGS AND CHARACTERISTIC CURVES US1A THRU US1M

