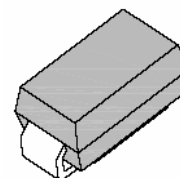


1.0A Surface Mount Ultra Fast Recovery Rectifier

Features

- Glass passivated junction chip
- Fast switching for high efficiency
- For surface mounted application
- High temperature soldering guaranteed: 250°C/10 seconds, at terminals
- Plastic material used carries UL Classification 94V-0
- RoHS Compliance

SMA



Mechanical Data

Case:	DO-214AC (SMA) molded plastic
Terminals:	Solder plated, solderable per MIL-STD-750, Method 2026
Polarity:	Color band denotes cathode end
Mounting Position:	Any
Weight:	0.002 ounce, 0.064 gram

Maximum Ratings and Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Symbol	Description	US1A	US1B	US1D	US1G	US1J	US1K	US1M	Unit	Conditions
VRRM	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	800	1000	V	
VRMS	Maximum RMS Voltage	35	70	140	280	420	560	700	V	
VDC	Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V	
IF(AV)	Maximum Average Forward Rectified Current	1.0							A	See Fig.1
IFSM	Peak Forward Surge Current	30							A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
VF	Maximum Instantaneous Forward Voltage	1.0			1.25	1.7			V	IF(AV)=1.0A
IR	Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0							μA	TA=25°C
		100								TA=125°C
Trr	Maximum Reverse Recovery Time	50				75			nS	IF=0.5A, IR=1.0A, Irr=0.25A
CJ	Typical Junction Capacitance	17							pF	VR=4V, f=1MHz

1.0A Surface Mount Ultra Fast Recovery Rectifier

US1A - US1M

Symbol	Description	US1A	US1B	US1D	US1G	US1J	US1K	US1M	Unit	Conditions
T_J, T_{STG}	Operating Junction and Storage Temperature Range	-55 to +150							° C	

Typical Characteristics Curves

Fig.1- Forward Current Derating Curve

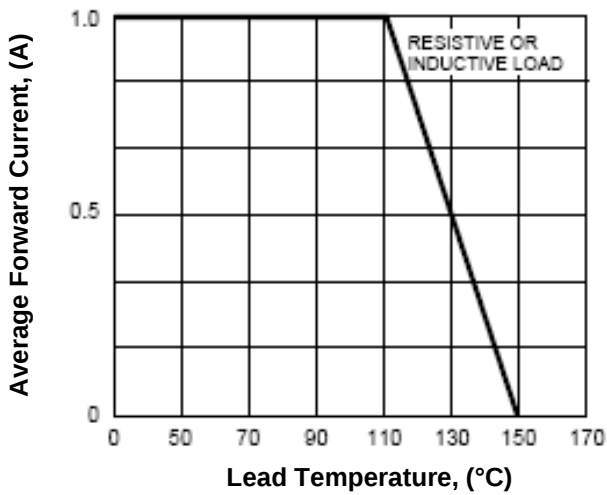


Fig.2- Maximum Non-Repetitive Forward Surge Current

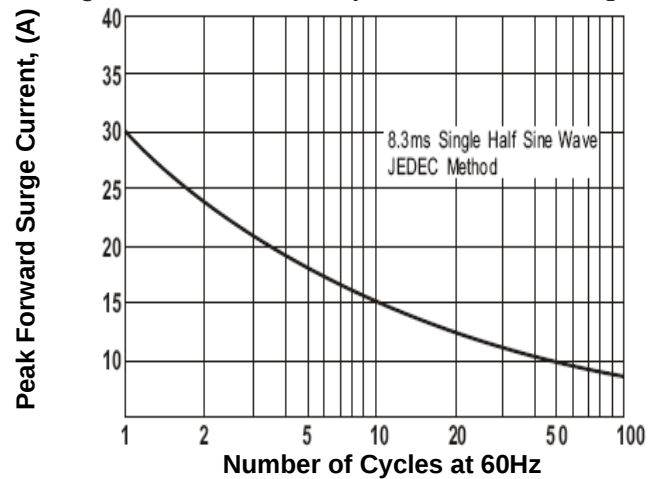


Fig.3- Typical Forward Characteristics

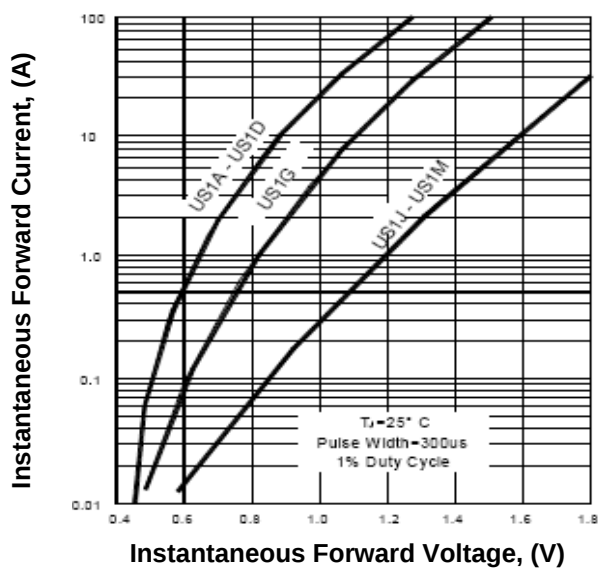
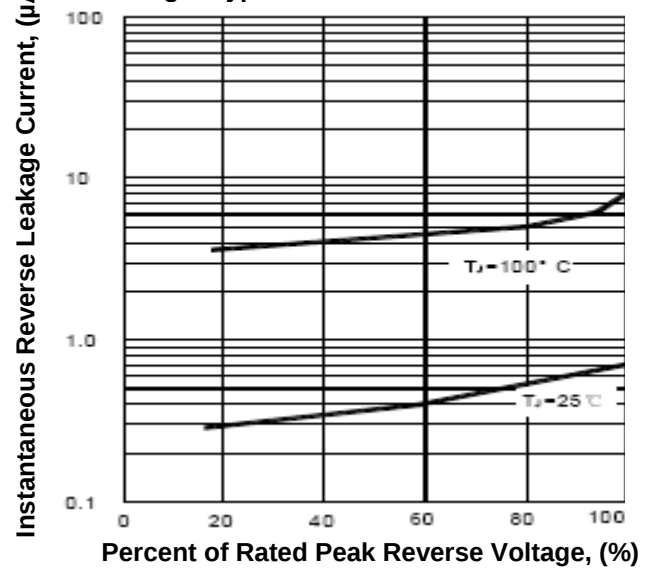


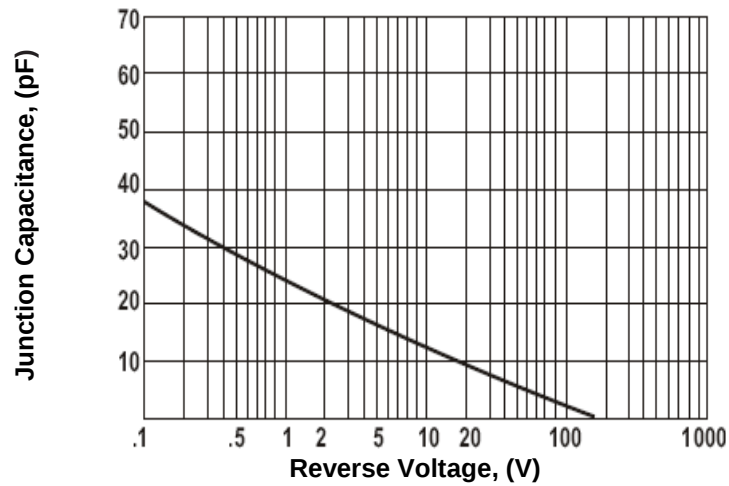
Fig.4- Typical Reverse Characteristics



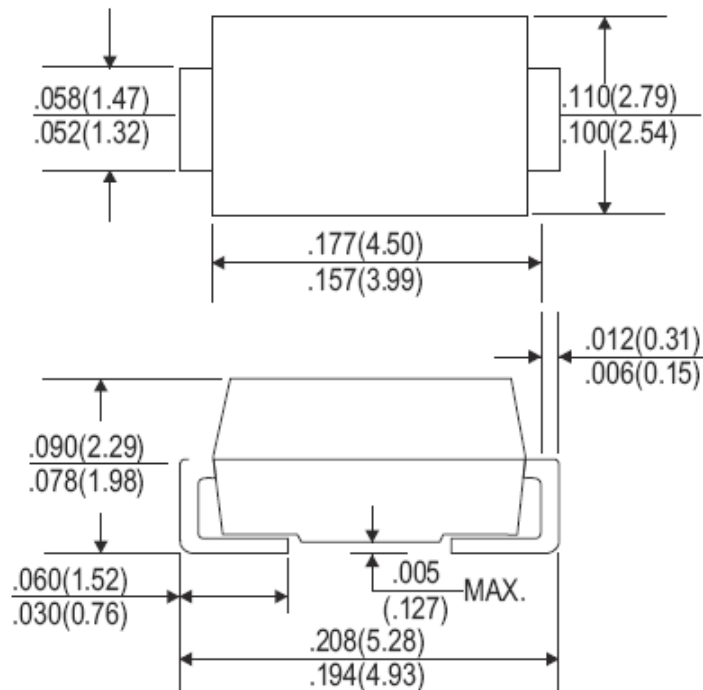
1.0A Surface Mount Ultra Fast Recovery Rectifier

US1A - US1M

Fig.5-Typical Junction Capacitance



Dimensions in inches (mm)



SMA (DO-214AC)

1.0A Surface Mount Ultra Fast Recovery Rectifier

US1A - US1M

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