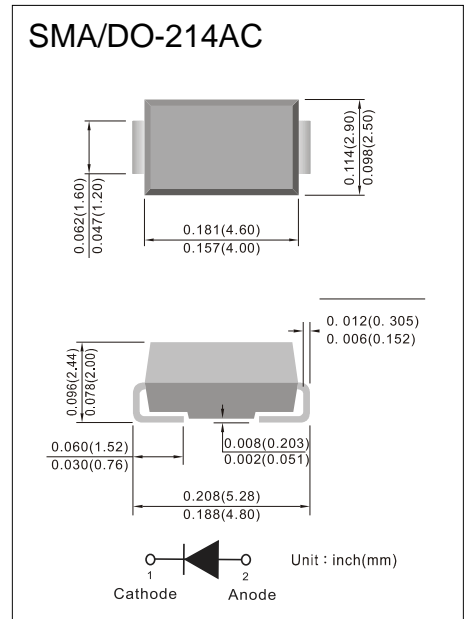


## ■ Features

- Glass passivated junction chip
- Ideal for automated placement
- Fast switching for high efficiency
- Comply with RoHS standard, halogen-free

## ■ Mechanical Data

- package:SMA/DO-214AC
- Polarity: Indicated by cathode band
- Epoxy: UL 94V-0 rate flame retardant
- Mounting Position : Any



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

PARAMETER	SYMBOL	US1A	US1B	US1D	US1F	US1G	US1J	US1K	US1M	UNIT	
Maximum repetitive peak reverse voltage	VRRM	50	100	200	300	400	600	800	1000	V	
Maximum RMS voltage	VRMS	35	70	140	210	280	420	560	700	V	
Maximum DC blocking voltage	VDC	50	100	200	300	400	600	800	1000	V	
Maximum average forward rectified current	IF(AV)	1								A	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load	IFSM	30								A	
Maximum instantaneous forward voltage (Note 1) @ 1 A	VF	1.0			1.3		1.7			V	
Maximum reverse current @ rated $V_R$ $T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$ $T_J=125^\circ\text{C}$	IR	5 50 150								$\mu\text{A}$	
Maximum reverse recovery time (Note 2)	$t_{rr}$	50					75				ns
Typical junction capacitance (Note 3)	$C_J$	20					15				pF
Typical thermal resistance	$R_{\theta JA}$	70								$^\circ\text{C/W}$	
Operating junction temperature range	$T_J$	- 55 to +150								$^\circ\text{C}$	
Storage temperature range	$T_{STG}$	- 55 to +150								$^\circ\text{C}$	

Note 1: Pulse test with PW=300 $\mu\text{s}$ , 1% duty cycle

Note 2: Reverse Recovery Test Conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{RR}=0.25\text{A}$

Note 3: Measured at 1 MHz and Applied  $V_R=4.0$  Volts



■ Ratings And Characteristics Curves( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

FIG.1- MAXIMUM AVERAGE FORWARD CURRENT DERATING

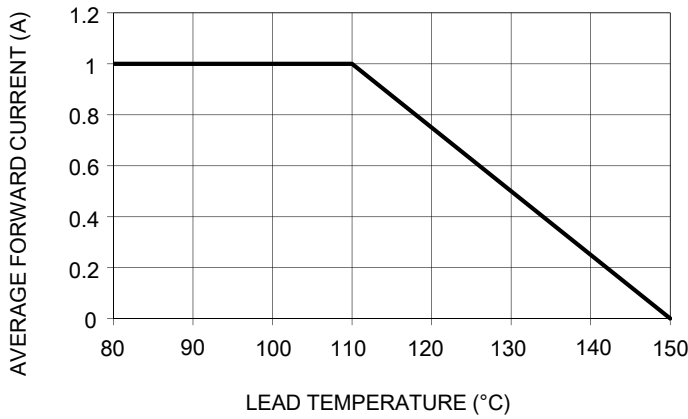


FIG. 2- TYPICAL REVERSE CHARACTERISTICS

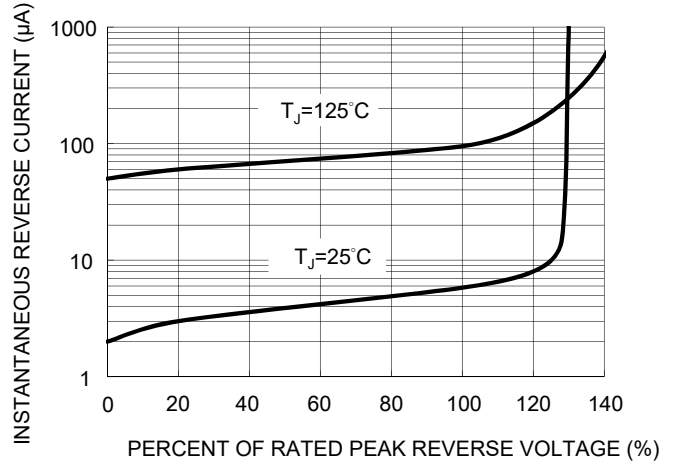


FIG. 3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

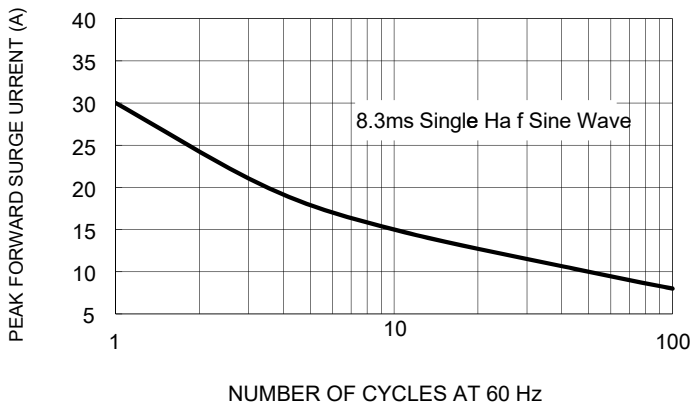


FIG. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

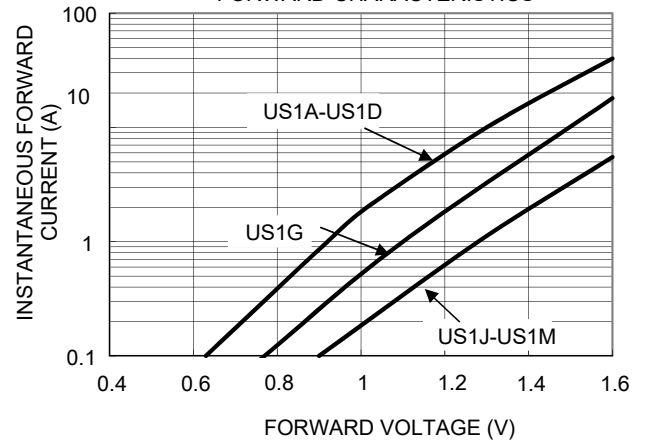


FIG. 5- TYPICAL JUNCTION CAPACITANCE

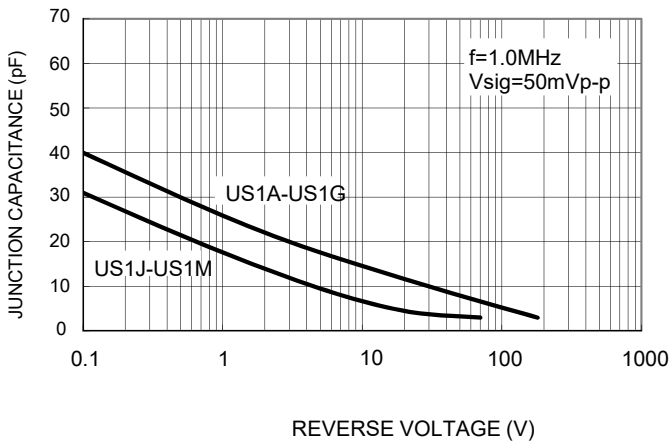


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

