US2AA THRU US2MA

REVERSE VOLTGE 50V~1000V
FORWARD CURRENT 2.0AMP
FAST RECOVERY RECTIFIER

FEATURES

* For surface mount applications
* Glass passivated chip junction
* Low profile package
* Super fast recovery time for high efficiency

DO- 214AC

SMA

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V- 0 rate flame retardant
* Polarity: Color band denotes cathode end
* Weight: 0.064 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	*SYMBOLS*	US2AA	US2BA	US2DA	US2GA	US2JA	US2KA	US2MA	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
Minimum Reverse Breakdown Voltage	V_R	50	100	200	400	600	800	1000	Volts
Average Rectified current at T_L=55℃	$I_{(AV)}$	2.0							Amp
Non- repetitive Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							Amps
Maximum Forward Voltage at IF=2.0A	V_F	1.0			1.3	1.7			Volts
Maximum DC reverse current at rated DC blocking voltage T_A= 25 ℃ / T_A=100℃	I_R	5.0 / 50.0							μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	50				75			nS
Typical Junction Capacitance (NOTE 2)	C_J	20							pF
Typical Thermal Resistance (NOTE 3)	$R_{\theta JA}$	50							℃/W
Typical Thermal Resistance (NOTE 3)	$R_{\theta JL}$	20							℃/W
Operating Junction & Storage Temperature Range	T_J, T_{STG}	- 55～ +150							℃

Note: 1. Reverse recovery condition IF=0.5A,IR=1.0A,Irr=0.25A
2. Measured at 1MHz and applied reverse voltage of4.0V D.C.
3. Mounted with minimum recommended padsize PCBoard FR4.

Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

FIG. 1- FORWARD CURRENT DERATING CURVE

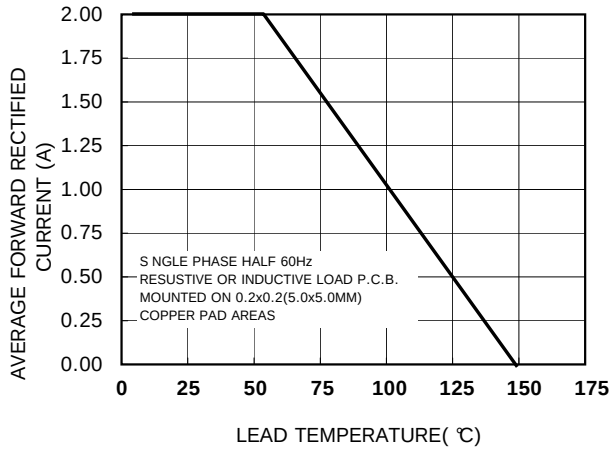


FIG. 2-TYPICAL JUNCTION RATINGS

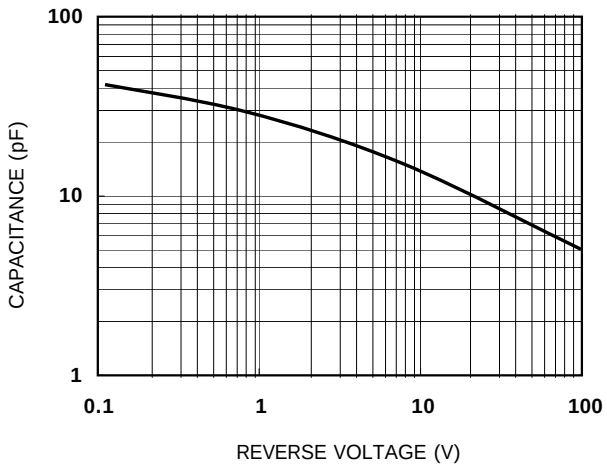


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

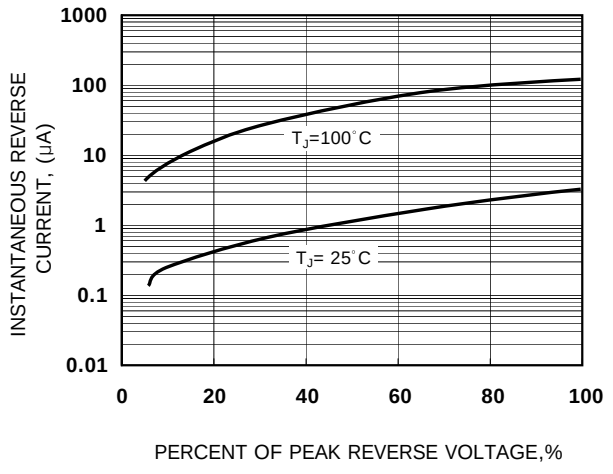
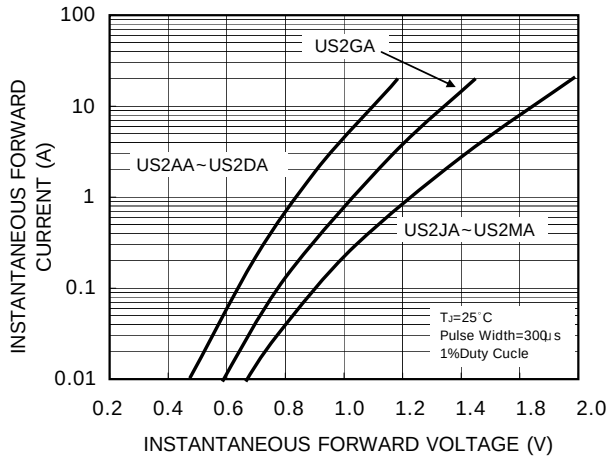
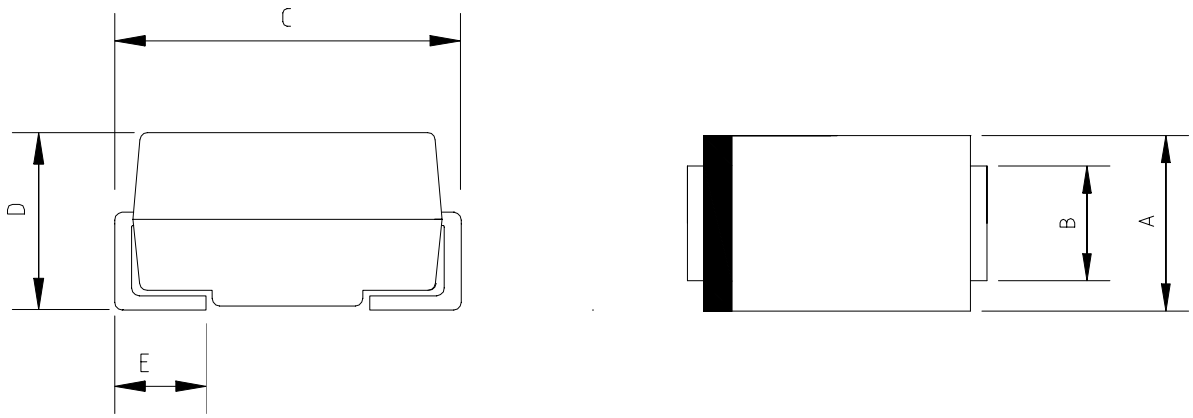


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



Package Dimensions in inches and (millmeters)

Package outline



Dimensions				
	inches		mm	
	Min.	Max.	Min.	Max.
A	0.095	0.104	2.40	2.65
B	0.050	0.064	1.27	1.63
C	0.189	0.205	4.8	5.2
D	0.075	0.089	1.9	2.25
E	0.031	0.059	0.8	1.5

Note:
DO-214AC
molded plastic case
The marking band indicates the cathode