50V~1000V 2.0A SMAF

Surface Mount Ultrafast Recovery Rectifier,Reverse Voltage:50 to1000V,Forward Current:2.0A, SMAF thin package.

RoHS 2011/65/EU

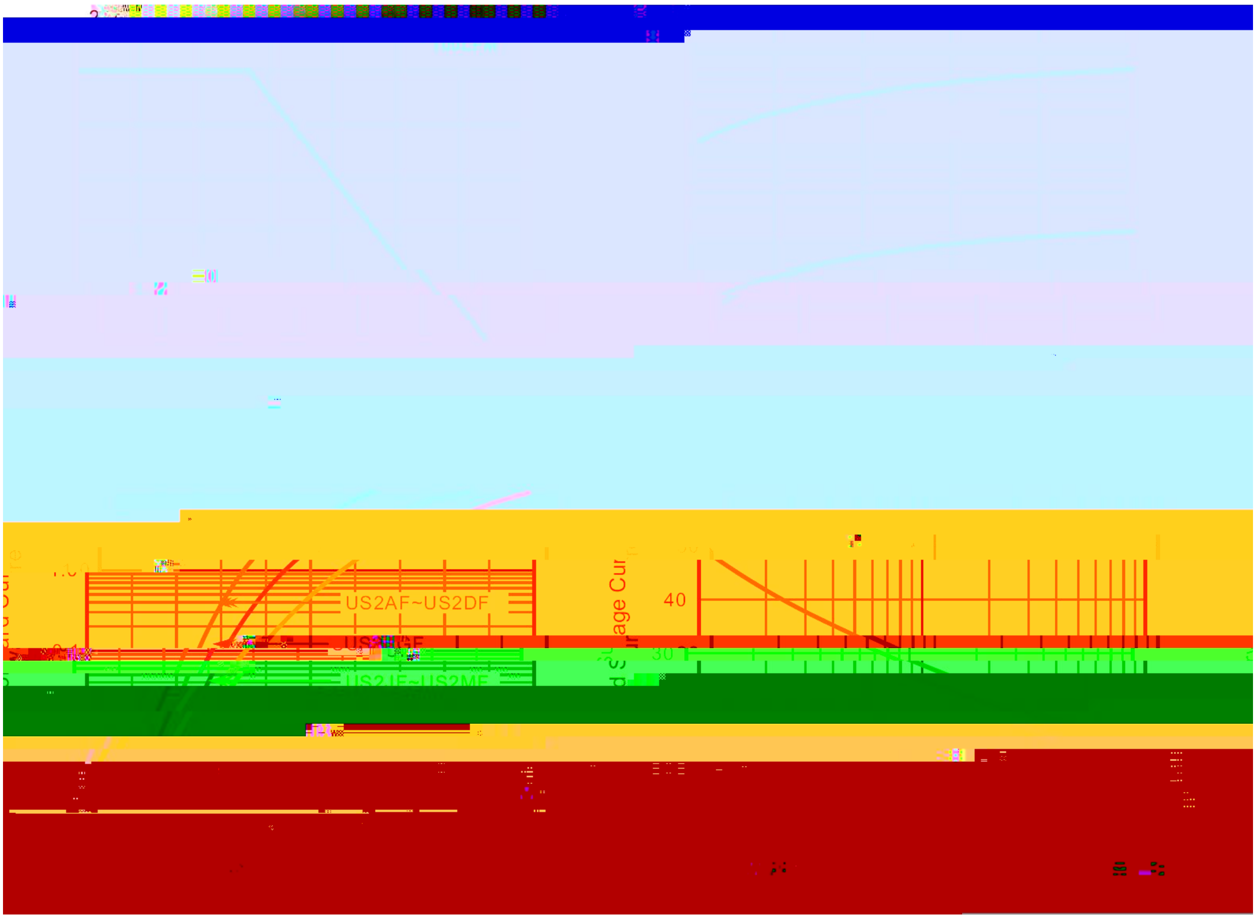
Glass Passivated Chip Junction

Parameter	Symbol	Rating							Unit
		US2AF	US2BF	US2DF	US2GF	US2JF	US2KF	US2MF	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Ta = 65	$I_{F\ AV}$	2.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50							A
Typical Thermal Resistance[1)]	$R_{\theta JA}$	75							/W
Operating and Storage Temperature Range	T_j,T_{stg}	-55~+150							

Note:

1) P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areass .

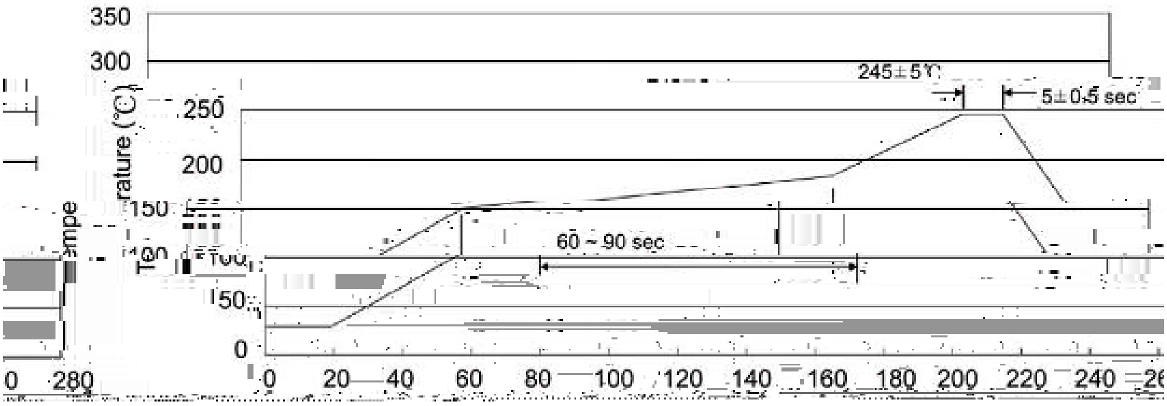
Parameter	Symbol	Test condition	Rating							Unit
			US2AF	US2BF	US2DF	US2GF	US2JF	US2KF	US2MF	
Maximum Instantaneous Forward Voltage	V_F	I_F=2.0A	1.0			1.3	1.65			V
Maximum DC Reverse Current at Maximum DC Blocking Voltage	I_R	T_a=25	5.0							uA
		T_a=125	100							
Maximum Reverse Recovery Time	T_{rr}	I_F=0.5A I_R=1.0A I_{rr}=0.25A	50				75			ns


US2AF~US2DF
US2GF
US2JF~US2MF
40
30

Marking

Type number	Marking code
US2AF	US2A
US2BF	US2B
US2DF	US2D
US2GF	US2G
US2JF	US2J
US2KF	US2K
US2MF	US2M

Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

1 150 180 60 90sec;

2 245±5 5±0.5sec;

3 2 10 /sec.

1.Preheating:150~180 , Time:60~90sec.

2.Peak Temp.:245±5 , Duration:5±0.5sec.

3. Cooling Speed: 2~10 /sec.

260±5 10±1 sec.

Temp.:260±5 Time:10±1 sec

/ REEL

Package Type	Units	Dimension (unit mm^3)