50V~1000V 1.0A SMB

Surface Mount Ultrafast Recovery Rectifier,Reverse Voltage:50 to1000V,Forward Current:1.0A, SMB package.

2011/65/EU RoHS

Glass Passivated Chip Junction High efficiency Lead free in comply with EU R0HS 2011/65/EU directives For surface mounted applications. Halogen free product.

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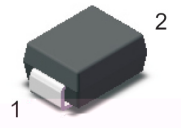
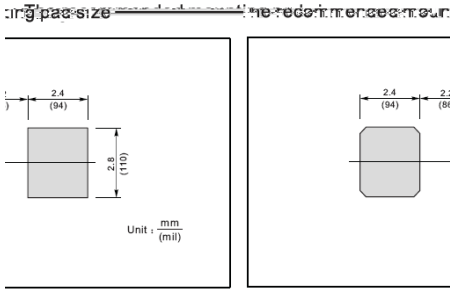
General purpose.



PIN	DESCRIPTION
1	Cathode
node	2 Ai



See Marking Instructions.

Parameter	Symbol	Rating							Unit
		US1AB	US1BB	US1DB	US1GB	US1JB	US1KB	US1MB	
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 Tc = 125	$I_{F\ AV}$	1.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30							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 2.0 X 2.0" (5 X 5 cm) copper pad areass .

Parameter	Symbol	Test condition	Rating							Unit
			US1AB	US1BB	US1DB	US1GB	US1JB	US1KB	US1MB	
Maximum Instantaneous Forward Voltage	V_F	I_F=1.0A	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

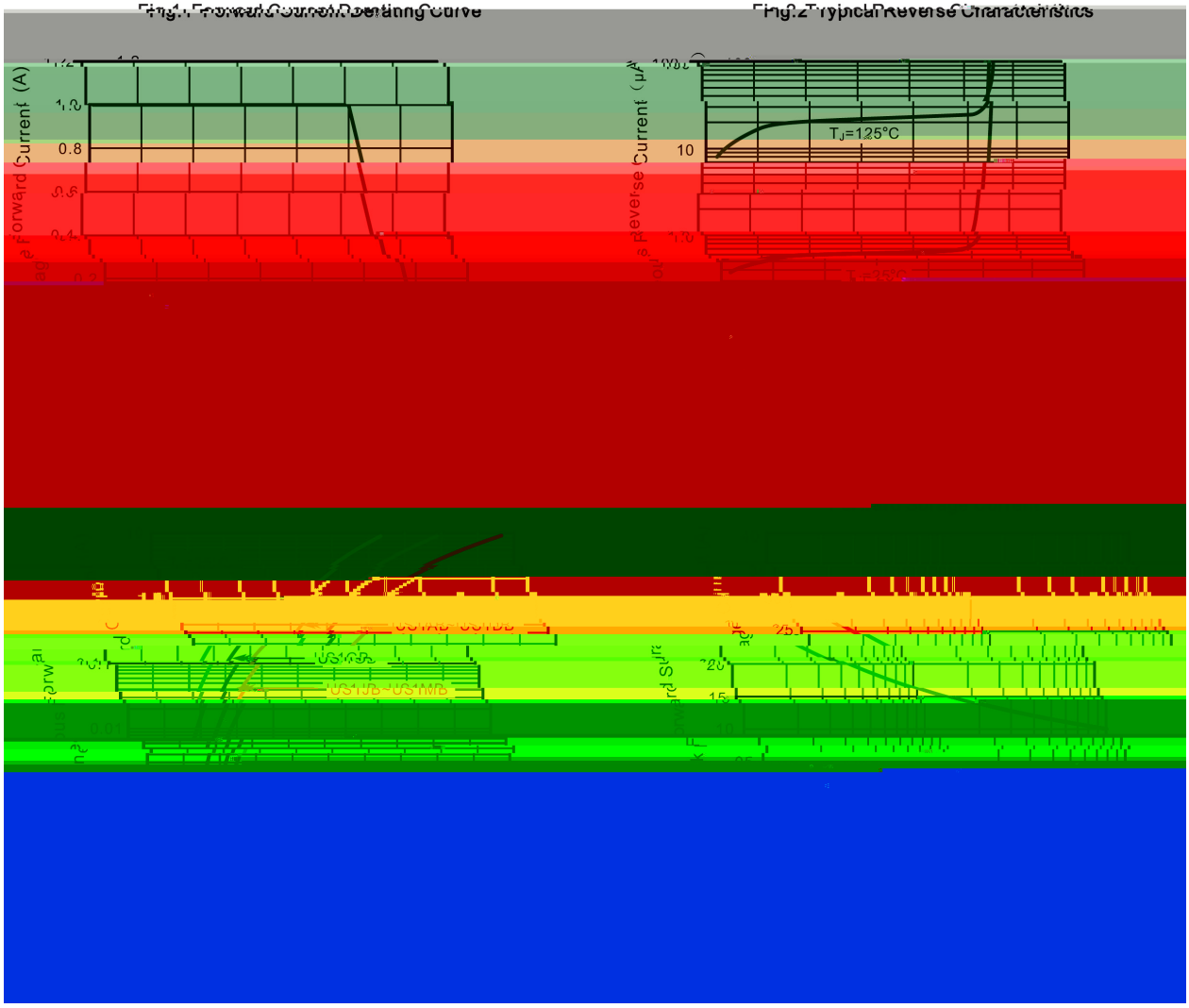
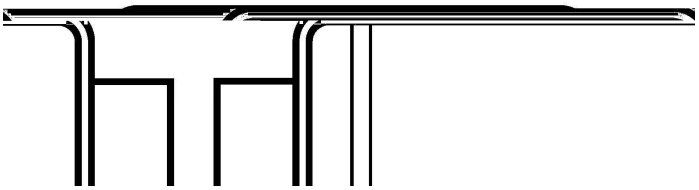


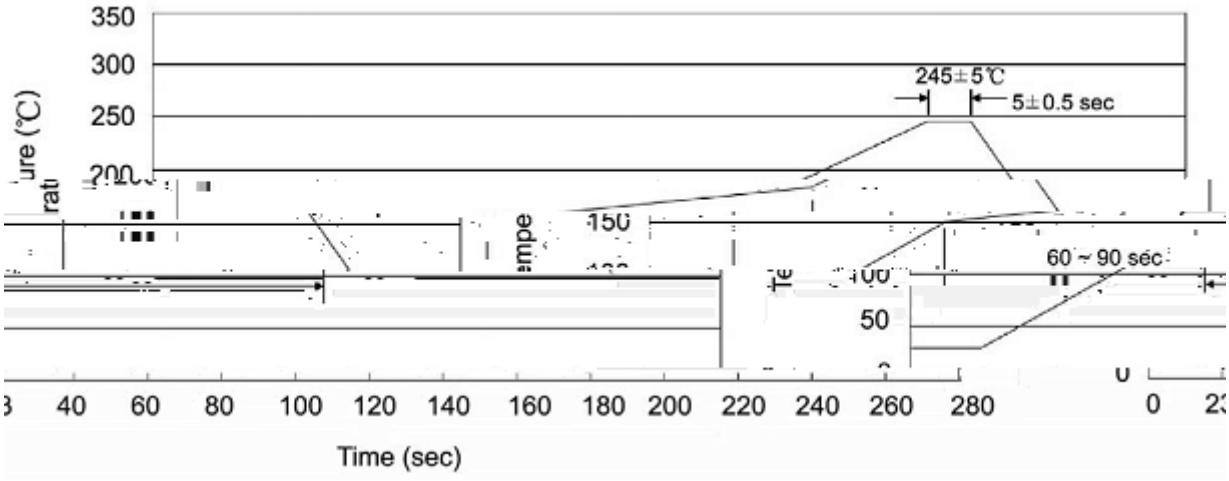
Fig.1 Forward Current Derating Curve
Fig.2 Typical Reverse Characteristics
Average Forward Current (A)
1.2
0.8
Reverse Current (μA)
10
T_J=125°C

Marking

Type number	Marking code
US1AB	US1A
US1BB	US1B
US1DB	US1D
US1GB	US1G
US1JB	US1J
US1KB	US1K
US1MB	US1M



Temperature Profile for IR Reflow Soldering(Pb-Free)



				Note:	
1	25	150	60 90sec;	1.Preheating:25~150	, Time:60~90sec.
2	245±5		5±0.5sec;	2.Peak Temp.:245±5	, Duration:5±0.5sec.
3		2 10	/sec.	3. Cooling Speed: 2~10	/sec.

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ REEL

Package Type 封装形式	Units 包装数量					Dimension 包装尺寸 (unit: mm^3)		
	Units/Reel 只/卷盘	Reels/Inner Box 卷盘/盒	Units/Inner Box 只/盒	Inner Boxes/Outer Box 盒/箱	Units/Outer Box 只/箱	Reel	Inner Box 盒	Outer Box 箱
SMB	3000	5	15000	5	75000	7 ×11	185X180X105	390X385X205