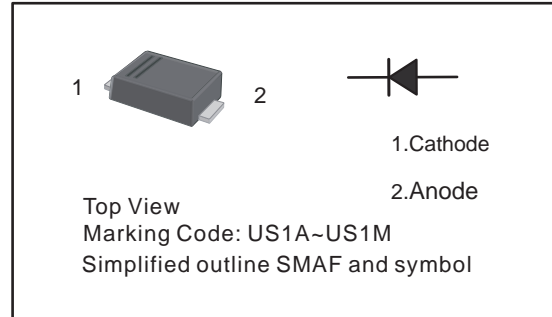


SURFACE MOUNT ULTRAFAST RECOVERY RECTIFIER

US1AF THRU US1MF

■ Features

- For Surface Mounted Applications
- Low Profile Package
- Glass Passivated Chip Junction
- Easy To Pick And Place
- High Efficiency



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	US1AF	US1BF	US1DF	US1GF	US1JF	US1KF	US1MF	Unit	
Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700		
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000		
Maximum Instantaneous Forward Voltage at 1A	V_F	1			1.3	1.65			A	
Forward Current	$I_{F(AV)}$	1								
Peak Forward Surge Current	I_{FM}	30								
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_a=25^\circ\text{C}$	I_R	5						uA	
	$T_a=125^\circ\text{C}$		100							
Reverse recovery time ⁽¹⁾	t_{rr}	50				75			ns	
Thermal Resistance Junction to Ambient ⁽²⁾	$R_{\theta JA}$	75							$^\circ\text{C/W}$	
Junction Temperature	T_J	-55 ~ +150							$^\circ\text{C}$	
Storage Temperature Range	T_{stg}									

(1) Measured with $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$

(2) P.C.B. mounted with 1.0 X 1.0" (2.54 X 2.54 cm) copper pad areas.

SURFACE MOUNT ULTRAFAST RECOVERY RECTIFIER

US1AF THRU US1MF

■ Typical Characteristics

Fig.1 Forward Current Derating Curve

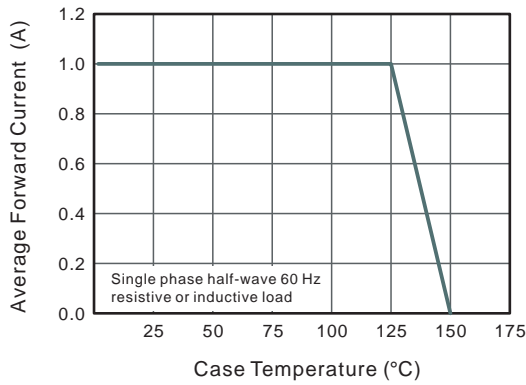


Fig.2 Typical Reverse Characteristics

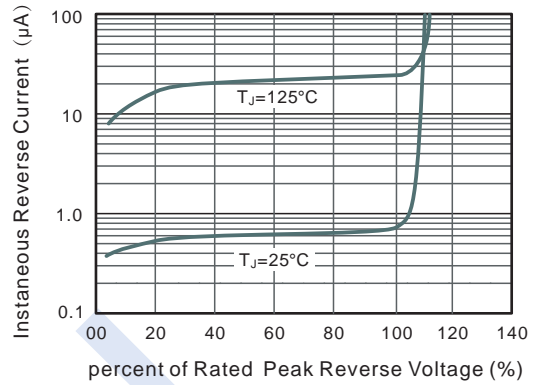


Fig.3 Typical Forward Characteristics

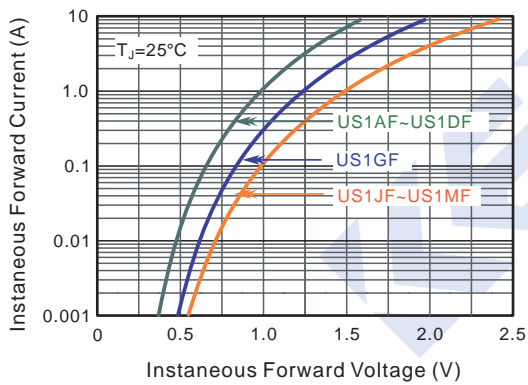
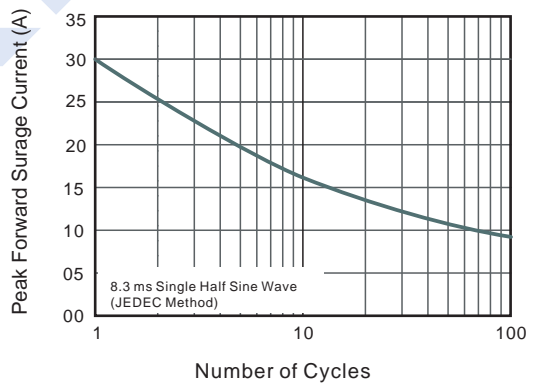


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

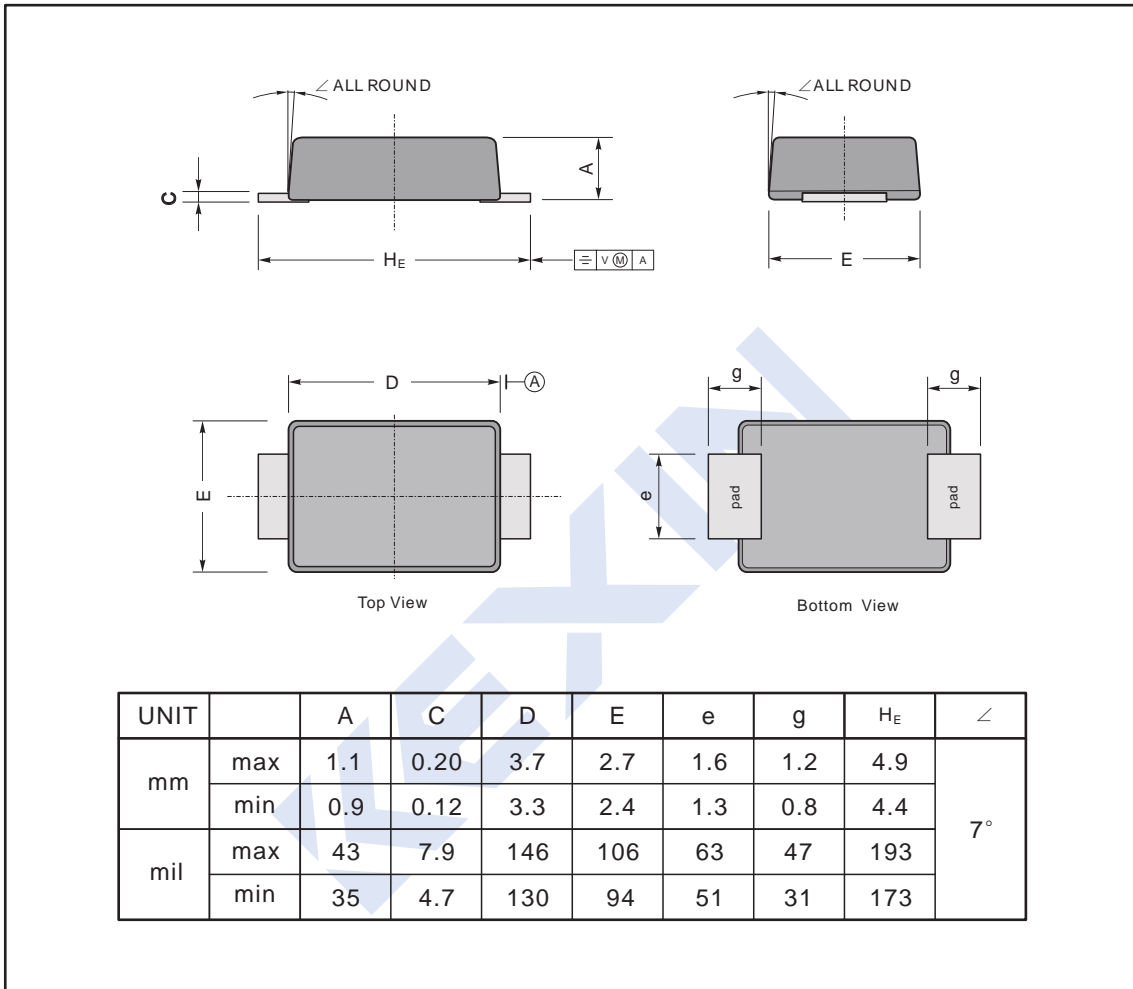


SURFACE MOUNT ULTRAFAST RECOVERY RECTIFIER US1AF THRU US1MF

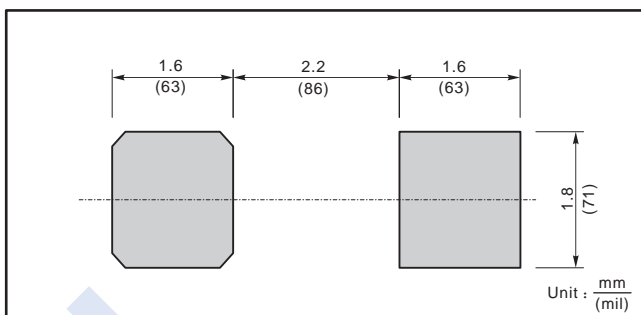
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMAF



The recommended mounting pad size



Marking

Type number	Marking code
US1AF	US1A
US1BF	US1B
US1DF	US1D
US1GF	US1G
US1JF	US1J
US1KF	US1K
US1MF	US1M