



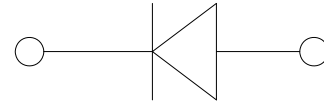
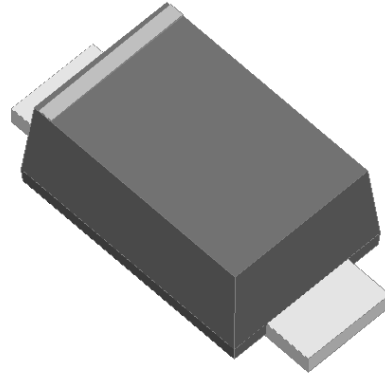
Ultrafast recovery Rectifier diode
Reverse Voltage 50V-1000v
Forward current-1A

Features

- Glass passivated chip
- High surge current capability
- Ideal for surface mounted applications
- Low power loss, high efficiency
- Plastic Case Material has UL Flammability

Mechanical Data

- Package: SMAF
- Terminals: Tin Plated leads, solderable per Mil-STD-750 Method 2026
- Polarity: As marked
- Molding compound meets UL 94 V-0 flammability rating, ROHS-compliant



Maximum Ratings (Ta=25°C Unless otherwise specified)

Type Number	SYMBOL	US1							
		AF	BF	DF	GF	JF	KF	MF	Umit
Maximum Recurrent 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	$I_{O(AV)}$	1.0							A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	25.0							A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		50.0							A
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I^2t	2.6							A ² S
Maximum Forward Voltage at 1.0A DC	V_{FM}	1.0		1.3		1.7		V	
Maximum Reverse Current TA = 25°C	IR	5.0							uA
at Rated DC Blocking Voltage TA = 125°C		100.0							
Maximum reverse recovery time	Trr	50.0				75.0			ns
Typical Thermal Resistance Between junction and	R_{QJa}	65.0							°C/W
Operating Junction Temperature Range	Tj	-55to+150							°C
Storage Temperature Range	TSTG	-55to+150							°C



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

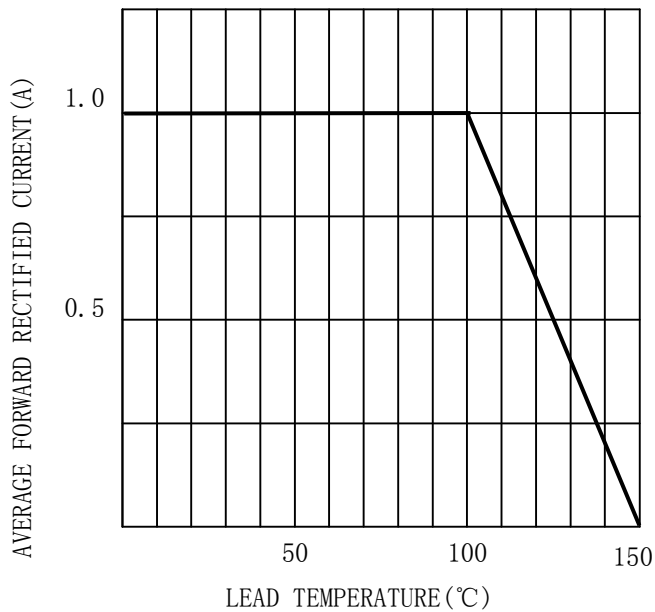


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

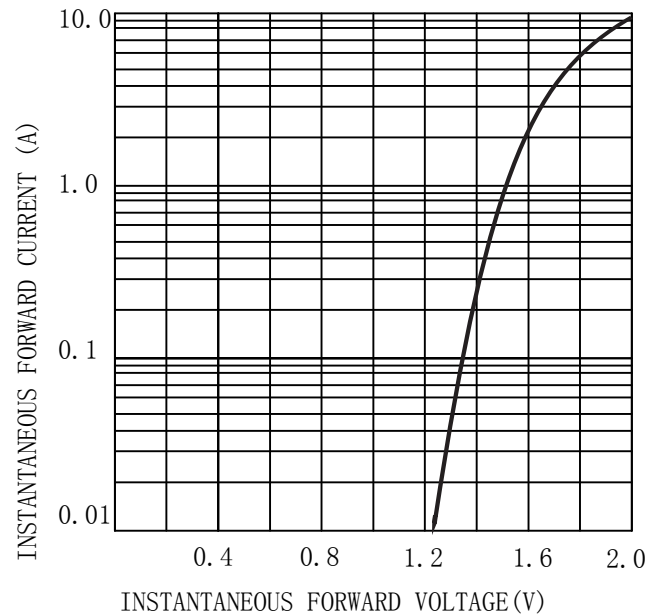


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

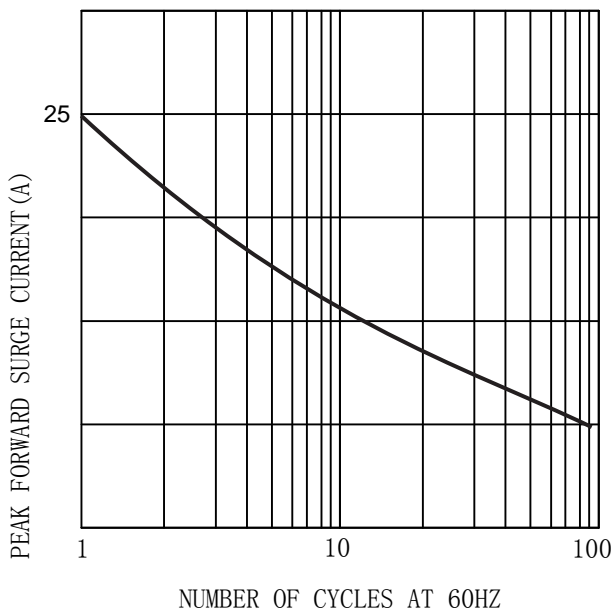
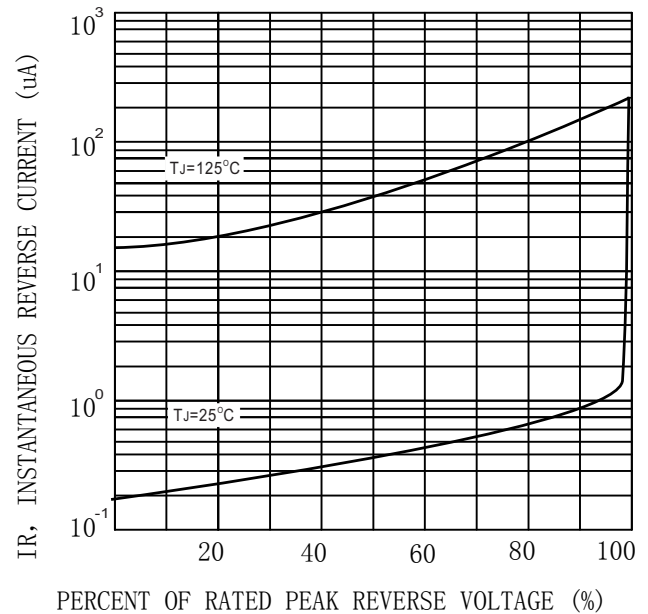



FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





MARKING INFORMATION



 = Logo

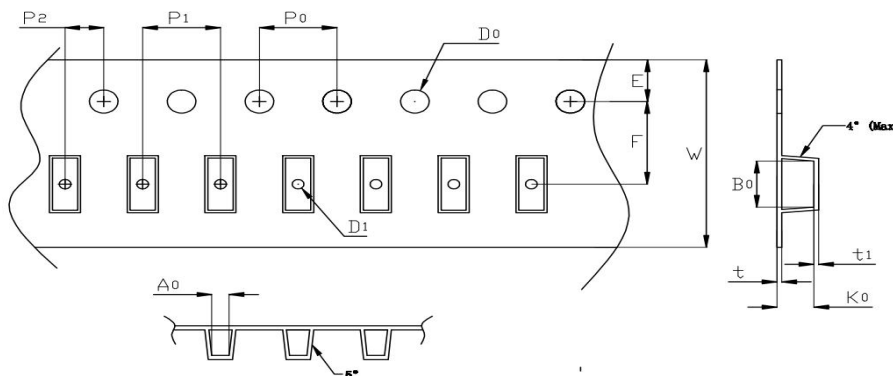
**** = Date Code Marking

US1* = Marking Code

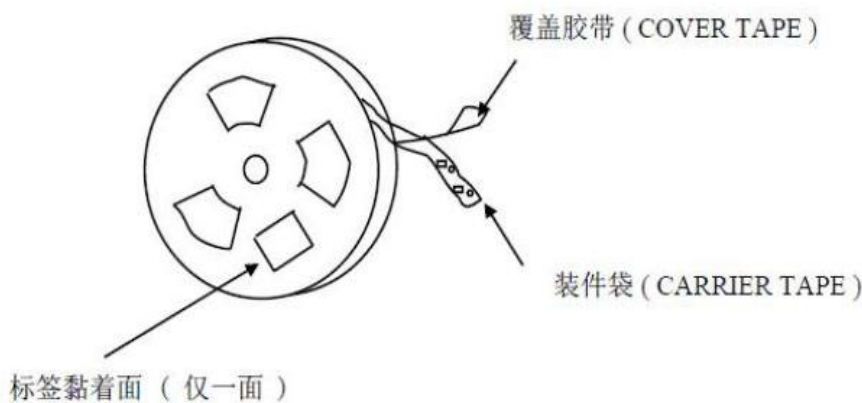
Print according to customer request

PACKING REQUIRMENTS

- Carrier tape packing



Specifications	Carrier tape type	Ao	Bo	Ko	Po	W	t	Explain
SMAF	Anti-static	2.83± 0.10	4.9± 0.10	1.45± 0.05	4.00± 0.10	12.0± 0.10	0.23± 0.05	

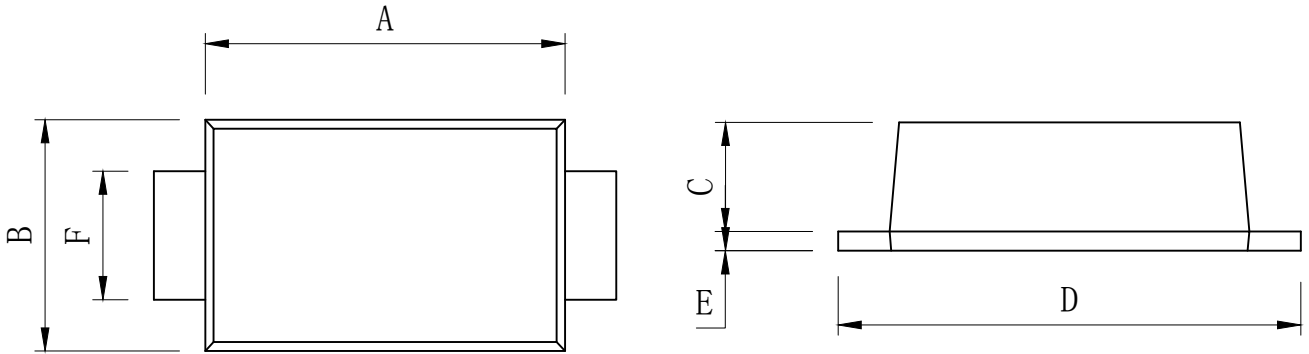


DEVICE TYPE	Tape width	13" Reel			7" Reel		
		Q'TY/REEL (pcs)	BOX/CAR TOON	Q'TY/REEL (pcs)	Q'TY/REEL (pcs)	BOX/CAR TOON	Q'TY/REEL (pcs)
SMAF	12mm	10000	20	200000	3000	64	192000



Outline Dimensions

SMAF



SMAF				
DIM	INC HES		MM	
	MIN	MAX	MIN	MAX
A	0.13	0.15	3.2	3.8
B	0.09	0.11	2.3	2.7
C	0.03	0.05	0.8	1.2
D	0.16	0.20	4	5
E	/	0.01	/	0.3
F	0.04	0.08	1	2



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