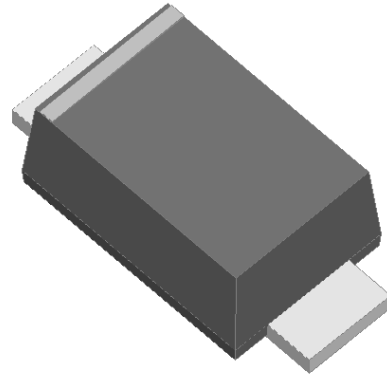




**Surface mount LVF Schottky diode**  
**Reverse Voltage 45V**  
**Forward current 5A**

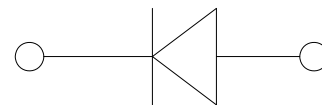
**Features**

- LVF Schottky chip
- Low VF, Low power losses, high efficiency
- Ideal for surface mounted applications
- Plastic Case Material has UL Flammability



**Mechanical Data**

- Package: SMAFL
- 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)**

Type Number	SYMBOL	SS54L	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	45	V
Maximum RMS Voltage	$V_{RMS}$	31.5	V
Maximum DC Blocking Voltage	$V_{DC}$	45	V
Maximum Average Forward Rectified Current at TL = 100°C	$I_{O(AV)}$	5.0	A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated load(JEDEC Method) on rated	IFSM	100.0	A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C		200.0	A
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	$i^2t$	41.5	A <sup>2</sup> S
Maximum Forward Voltage at 5.0A DC	$V_{FM}$	0.45	V
Maximum Reverse Current TA = 25°C	IR	0.2	mA
at Rated DC Blocking Voltage TA = 100°C		10.0	
Typical Thermal Resistance Between junction and ambient	$R_{QJa}$	65.0	°C/W
Operating Junction Temperature Range	$T_J$	-55to+150	°C
Storage Temperature Range	$T_{STG}$	-55to+150	°C



FIG. 1 MAXIMUM AVERAGE FORWARD CURRENT DERATING

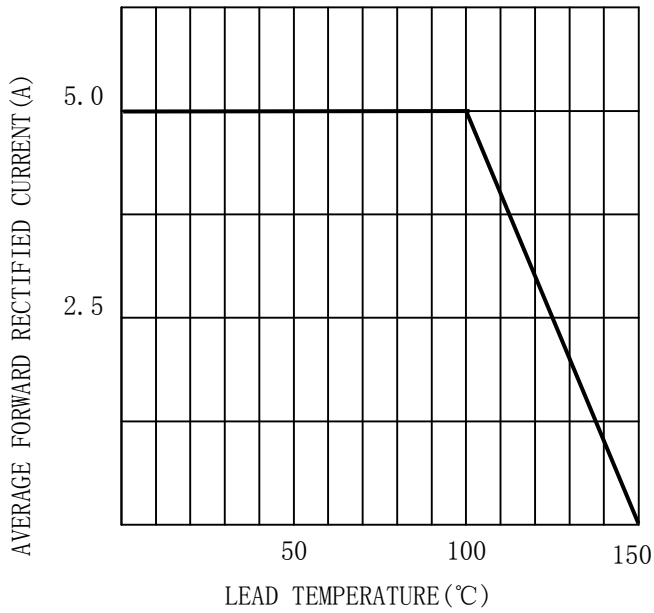


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

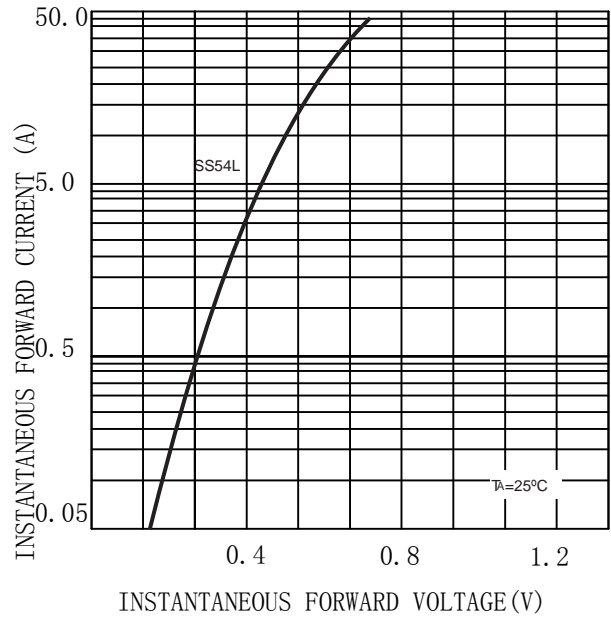


FIG. 3 MAXIMUM NON-REPEITIVE SURGE CURRENT

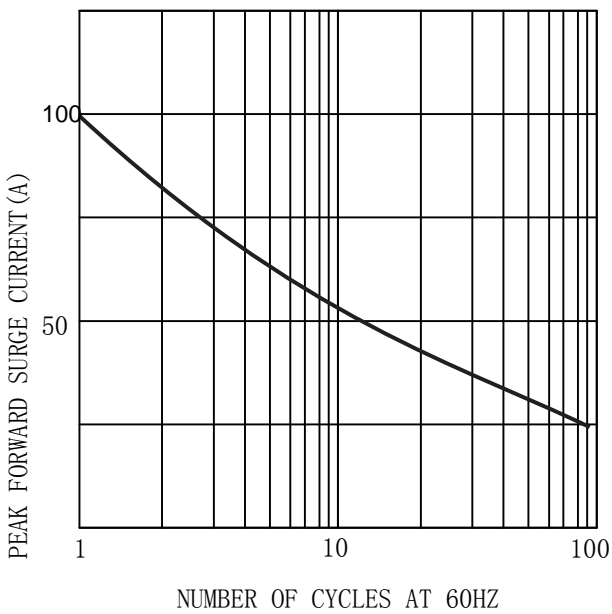
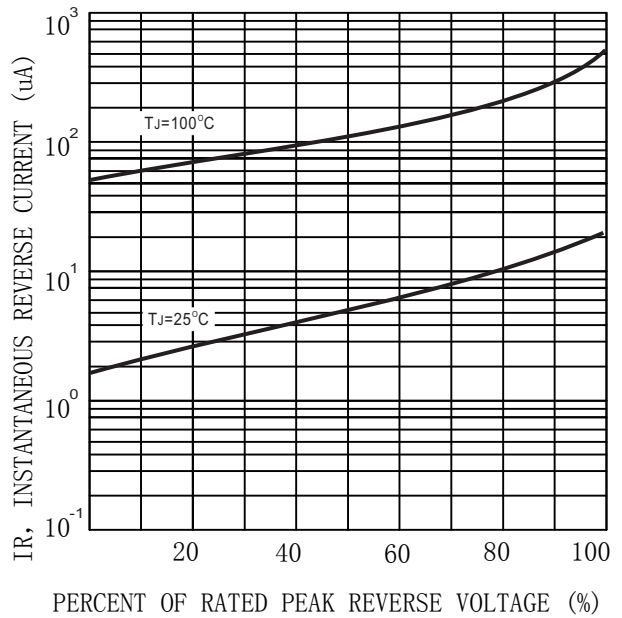


FIG. 4 TYPICAL REVERSE CHARACTERISTICS (per element)





## MARKING INFORMATION



= Logo

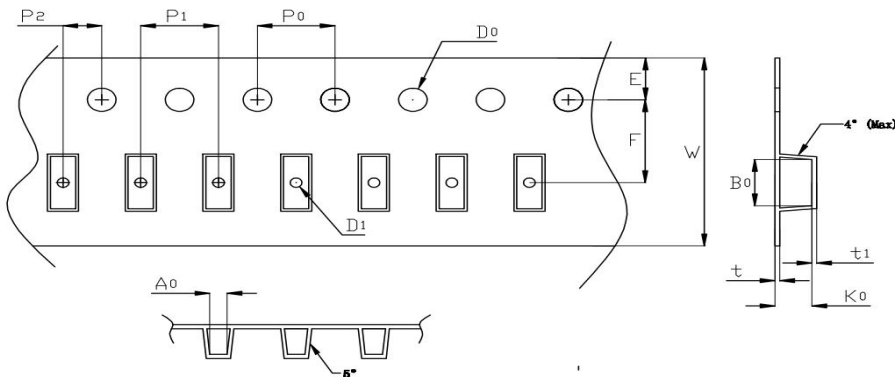
\*\*\*\* = Date Code Marking

SS\*\* = Marking Code

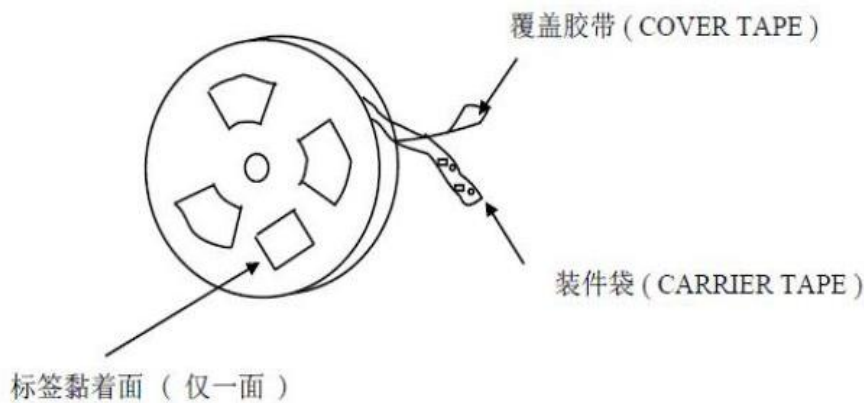
Print according to customer request

## PACKING REQUIRMENTS

### Carrier tape packing



Specifications	Carrier tape type	Ao	Bo	Ko	Po	W	t	Explain
SMAFL	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	

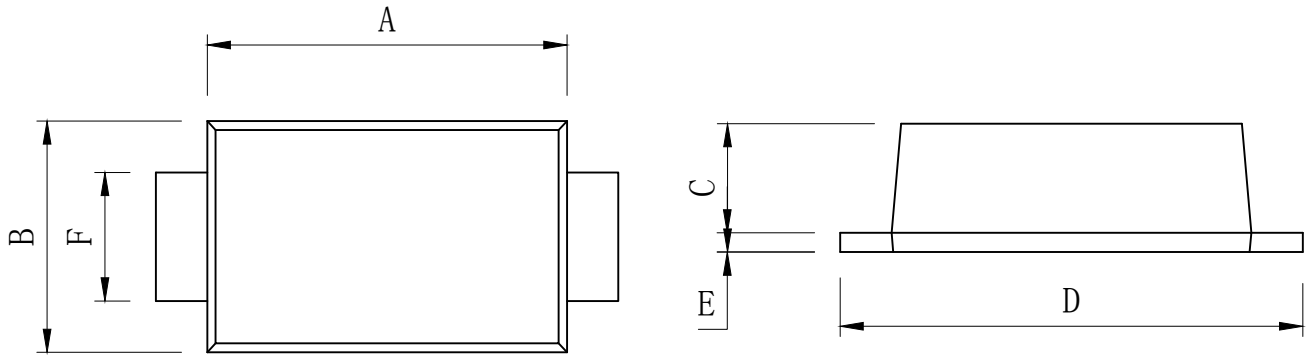


DEVICE TYPE	Tape width	13"Reel			7"Reel		
		Q'TY/REEL (pcs)	BOX/CAR TOON	Q'TY/REEL (pcs)	Q'TY/REEL (pcs)	BOX/CAR TOON	Q'TY/REEL (pcs)
SMAFL	12mm	10000	20	200000	3000	64	192000



Outline Dimensions

SMAFL



SMAFL				
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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