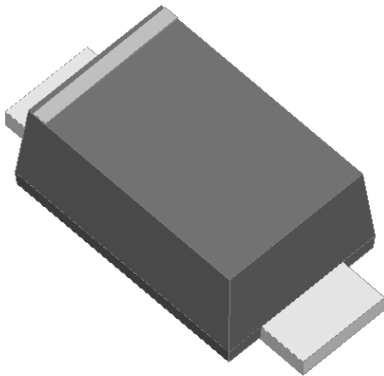


Surface Mount Fast Recovery Rectifier F15A THRU F15M

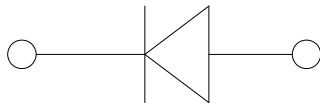


Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- Fast switching for fast recovery
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Typical Applications

For use in fast switching rectification of power supply, inverters, converters, and freewheeling diodes for consumer and telecommunication.



- Package: SOD-123FL

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

PARAMETER	SYMBOL	UNIT	F15A	F15B	F15D	F15G	F15J	F15K	F15M
Device marking code			F15A	F15B	F15D	F15G	F15J	F15K	F15M
Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, Resistance load, TL (FIG.1)	IO	A	1.5						
Surge(non-repetitive)forward current @ 60Hz half-sine wave,1 cycle, Ta=25°C	IFSM	A	45						
Storage temperature	Tstg	°C	-55 ~+150						
Junction temperature	Tj	°C	-55 ~+150						

■Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	F15A	F15B	F15D	F15G	F15J	F15K	F15M
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=1.5A	1.3						
Maximum reverse recovery time	t _{rr}	ns	IF=0.5A,IR=1.0A, IRR=0.25A	150			250		500	
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	µA	Ta=25°C	5						
			Ta=125°C	100						

F15A THRU F15M

■ Thermal Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	F15A	F15B	F15D	F15G	F15J	F15K	F15M
Typical Thermal resistance	RθJ-A ¹⁾	°C/W	65						
	RθJ-L ¹⁾		30						

Note:
 (1) Thermal resistance between junction and ambient and between junction and lead mounted on P.C.B with 3mm*3mm copper pad areas.

■ Characteristics (Typical)

FIG1:Io-TL Curve

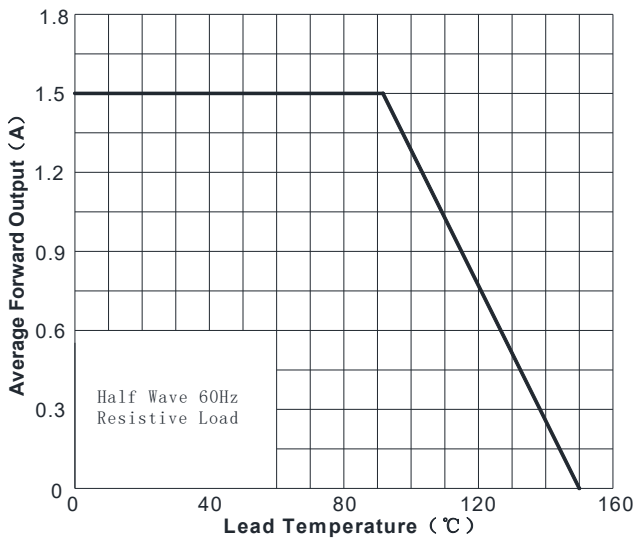


FIG2: Surge Forward Current Capability

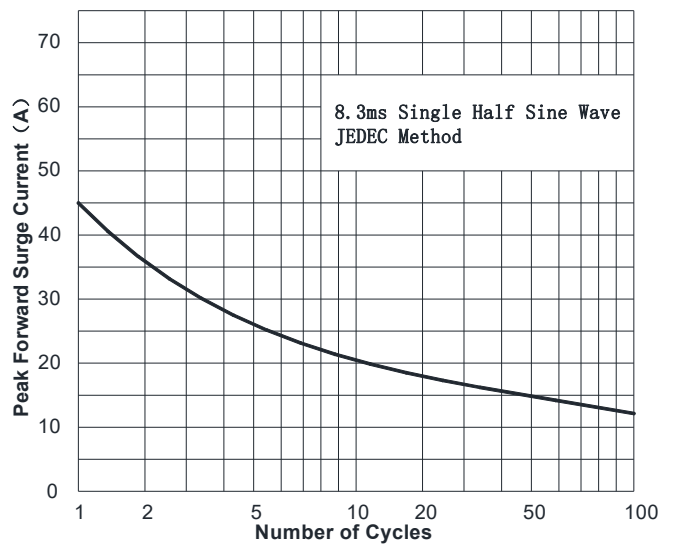


FIG3: Forward Voltage

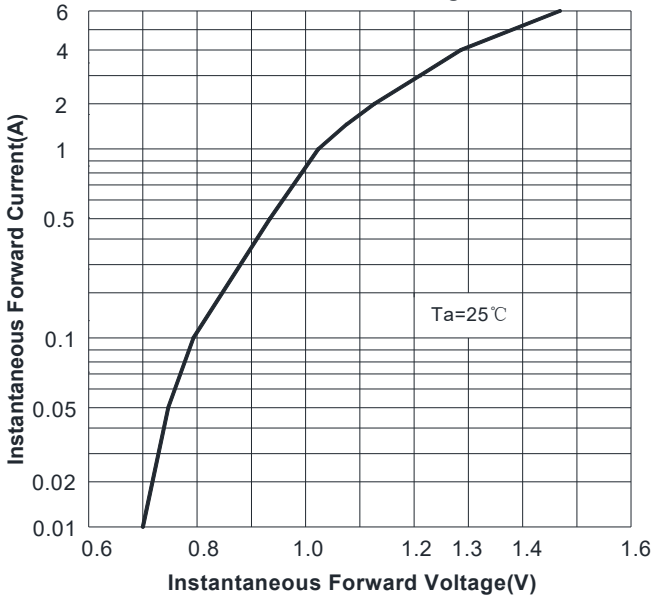


FIG4: Typical Reverse Characteristics

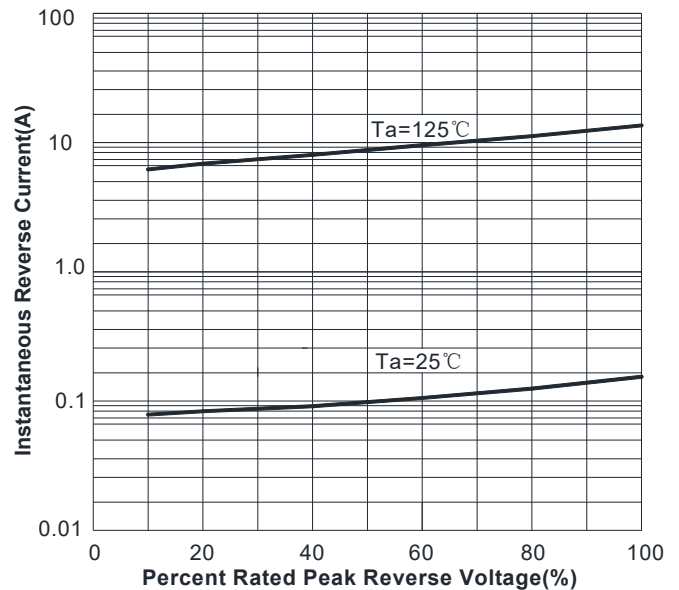
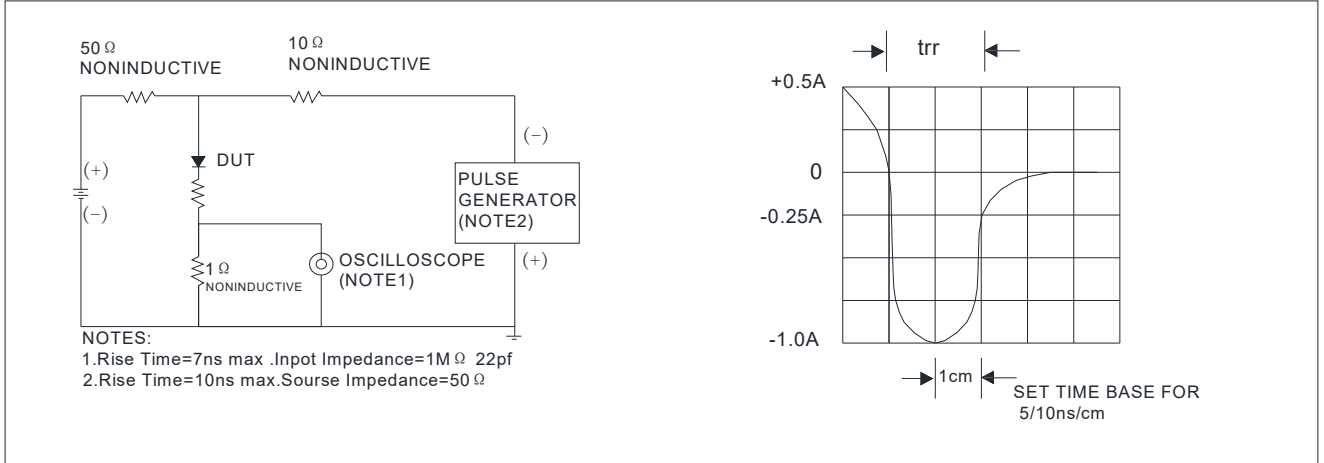
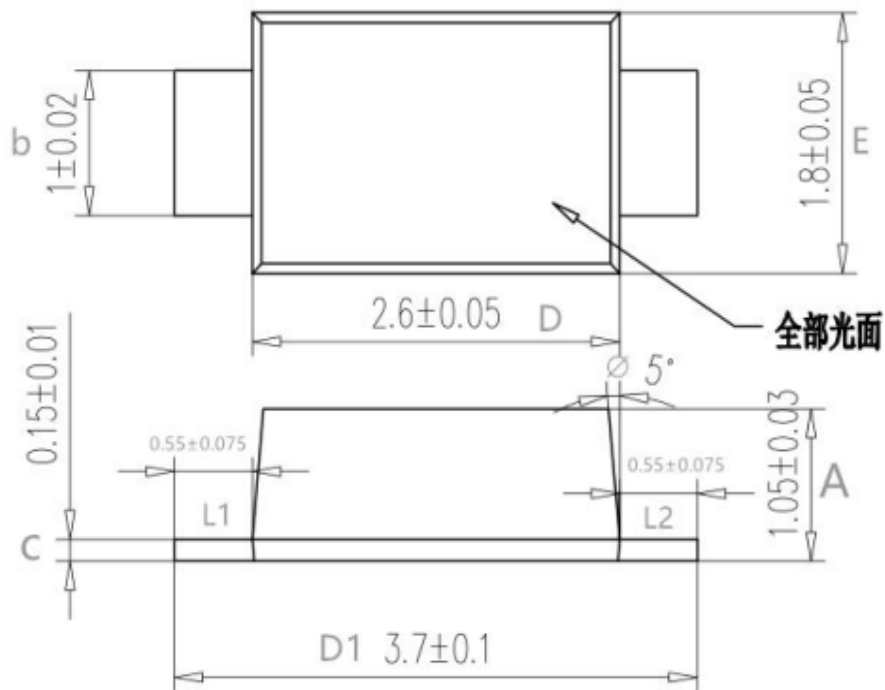


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

F15A THRU F15M





项目	公制 (mm)	
	MIN	MAX
*A	1.02	1.08
*b	0.98	1.02
*c	0.14	0.16
*D	2.55	2.65
*D1	3.60	3.80
*E	1.75	1.85
*L1	0.475	0.625
*L2	0.475	0.625
∅	4°	6°
带*为检验尺寸		