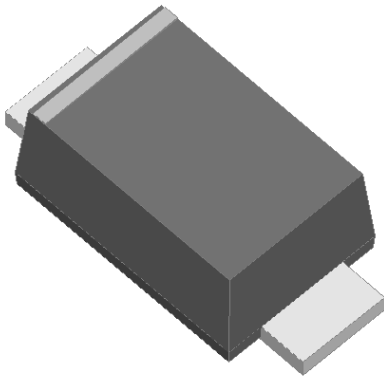


U1A THRU U1J

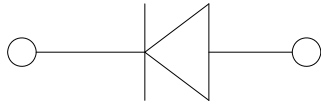


Features

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

Typical Applications

For use in high frequency rectification of power supplies, inverters, converters, and freewheeling diodes for consumer and telecommunication.



Mechanical Data

- **Package:** SOD-123FL
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

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

PARAMETER	SYMBOL	UNIT	U1A	U1B	U1C	U1D	U1F	U1G	U1H	U1J
Device marking code			U1A	U1B	U1C	U1D	U1F	U1G	U1H	U1J
Repetitive peak reverse voltage	VRRM	V	50	100	150	200	300	400	500	600
Average rectified output current @60Hz sine wave, Resistance load, TL (FIG.1)	IO	A	1.0							
Surge(non-repetitive)forward current @ 60Hz Half-sine wave,1 cycle, Ta=25°C	IFSM	A	30							
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	U1A	U1B	U1C	U1D	U1F	U1G	U1H	U1J
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=1.0A	0.92			1.25		1.7		
Maximum reverse recovery time	TRR	ns	IF=0.5A,IR=1.0A, IIR=0.25A	25						35	
Maximum DC reverse current at rated DC blocking voltage per diode @ VRM=VRRM	IRRM	µA	Ta=25°C	5							
			Ta=100°C	50							

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

PARAMETER	SYMBOL	UNIT	U1A	U1B	U1C	U1D	U1F	U1G	U1H	U1J
Typical Thermal resistance	R θ J-A ⁽¹⁾	°C/W	65 ⁽¹⁾							
	R θ J-L ⁽¹⁾		22 ⁽¹⁾							

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)

FIG.1: Io-TL Cure

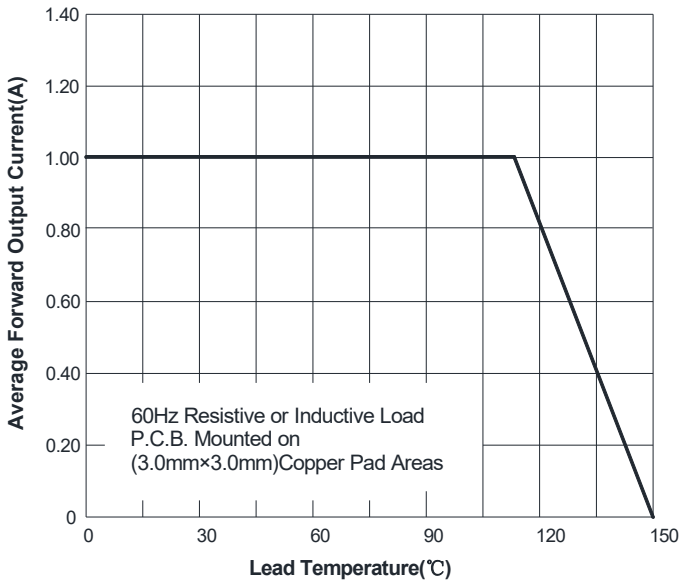


FIG.2: Forward Surge Current Capability

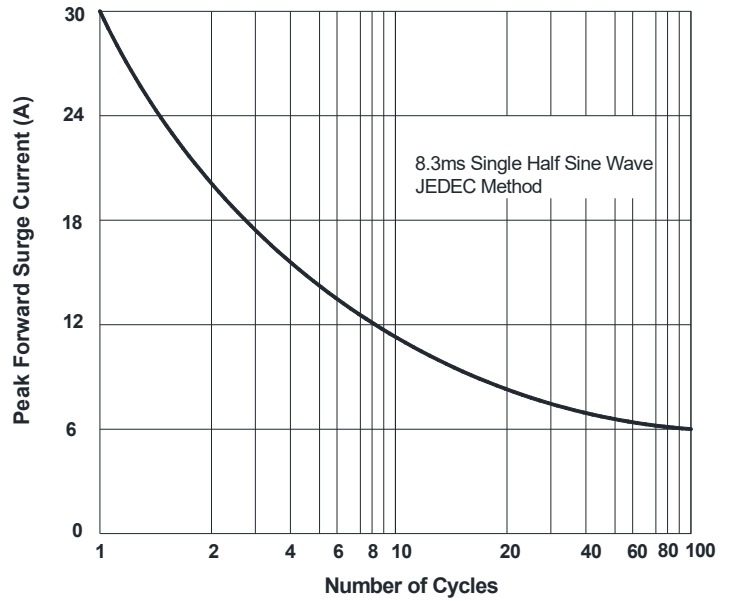


FIG.3: Typical Forward Characteristics

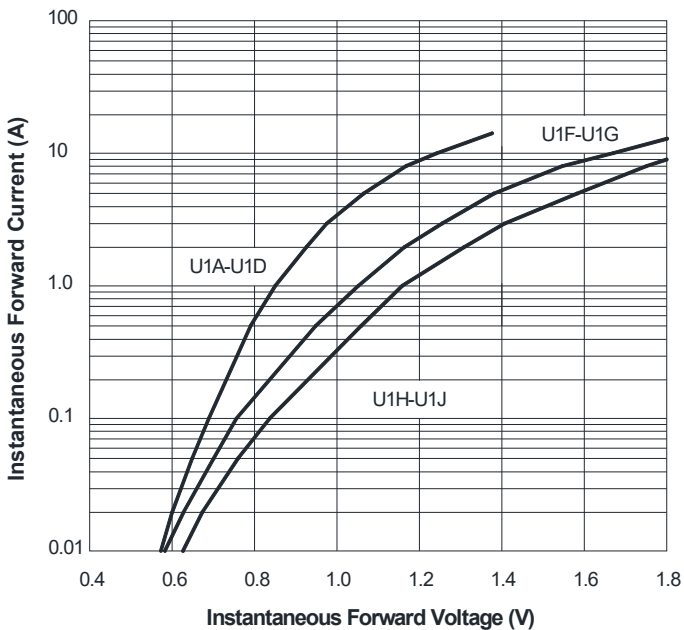
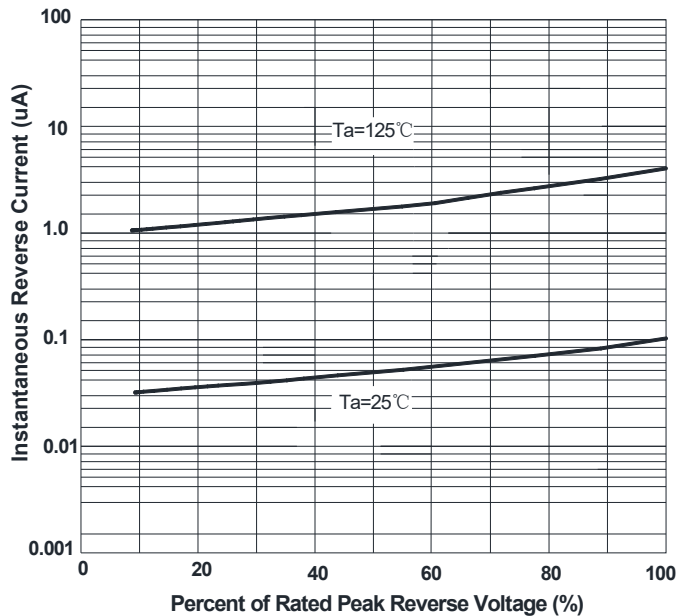
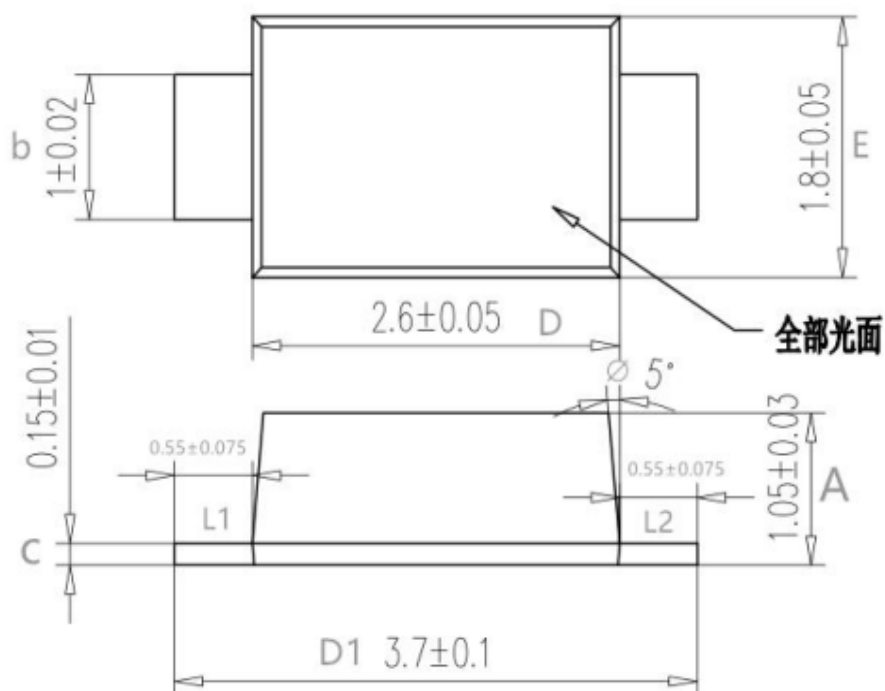


FIG.4: Typical Reverse Characteristics





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
θ	4°	6°
带*为检验尺寸		