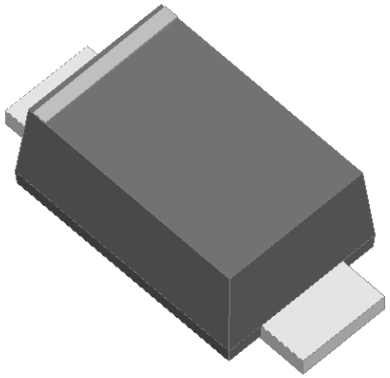
Surface Mount Schottky Rectifier

S22Q THRU S220Q

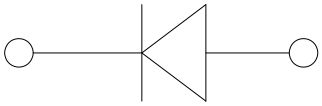


Features

- Low profile package
- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- Part no. with suffix “Q” means AEC-Q101 qualified

Typical Applications

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, automotive and polarity protection applications.



- **Package**: SOD-123FL

■Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	S22Q	S23Q	S24Q	S25Q	S26Q	S28Q	S210Q	S215Q	S220Q
Device marking code			S22	S23	S24	S25	S26	S28	S210	S215	S220
Repetitive peak reverse voltage	V_{RRM}	V	20	30	40	50	60	80	100	150	200
Average rectified output current @60Hz sine wave, Resistance load, Ta (FIG.1)	I_O	A	2.0								
Surge(non-repetitive)forward current @60Hz half-sine wave,1 cycle, T_j=25℃	I_{FSM}	A	50								
Storage temperature	T_{stg}	℃	-55 ~+150								
Junction temperature	T_J	℃	-55 ~+125			-55 ~+150					

■Electrical Characteristics (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	S22Q	S23Q	S24Q	S25Q	S26Q	S28Q	S210Q	S15Q	S220Q
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=2.0A	0.5			0.7		0.85		0.9	
Maximum DC reverse current at rated DC blocking voltage per diode @ $V_{RM}=V_{RRM}$	I_{RRM}	mA	Ta=25℃	0.50					0.10			
			Ta=100℃	10					5			

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■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	S22Q	S23Q	S24Q	S25Q	S26Q	S28Q	S210Q	S215Q	S220Q
Thermal Resistance	$R_{\theta J-A}$	℃/W	70[1)]								
	$R_{\theta J-L}$		20[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)

FIG1:Io-T_L Curve

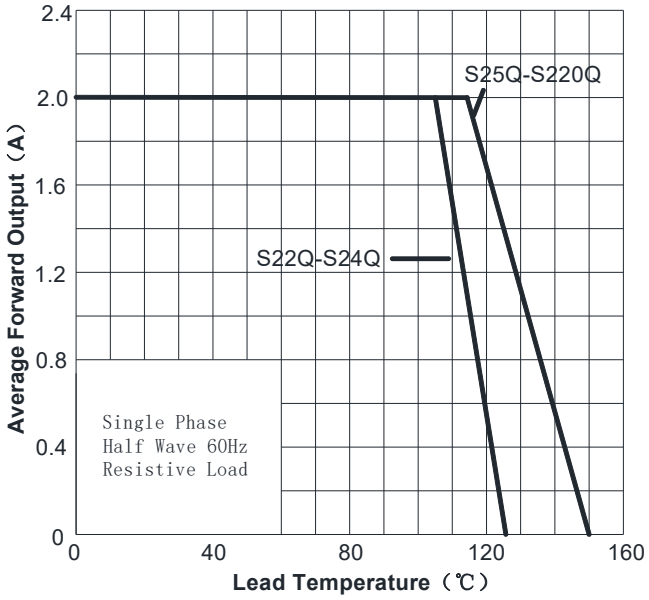


FIG2: Surge Forward Current Capability

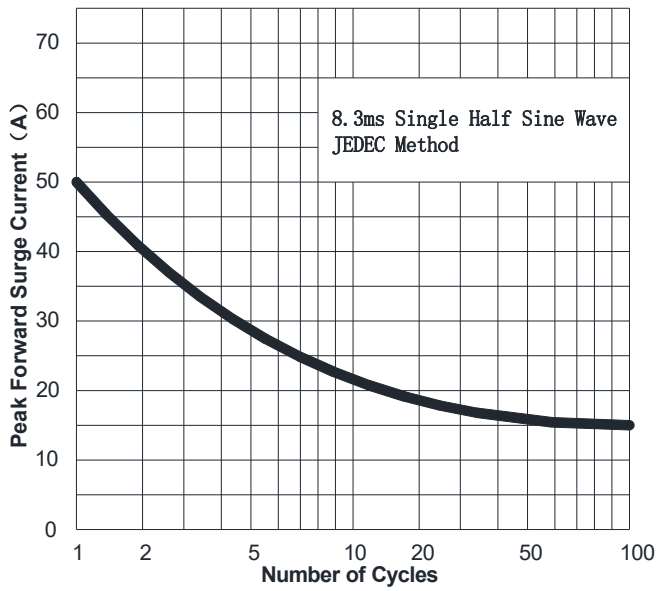


FIG3: Forward Voltage

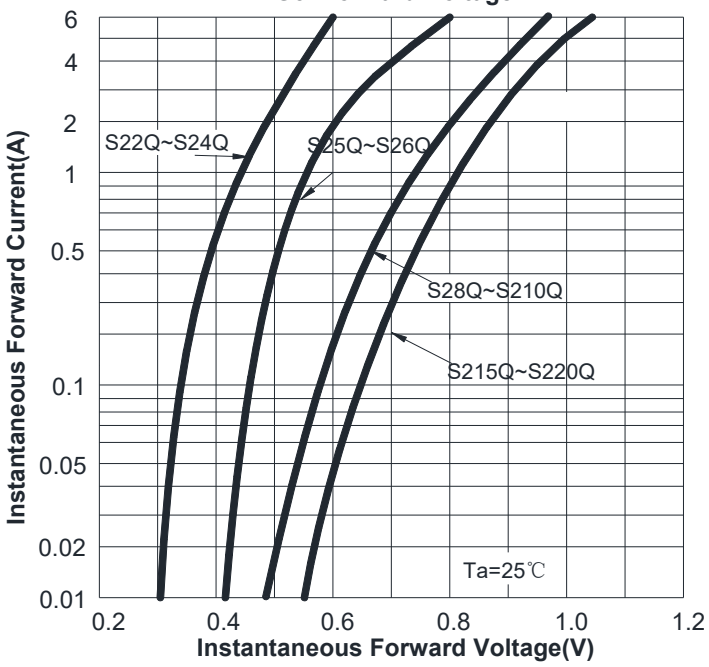
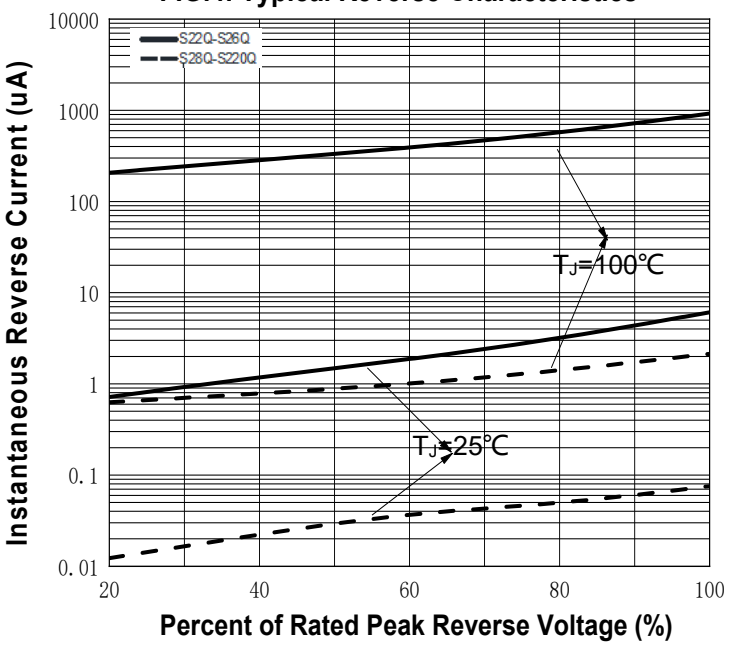
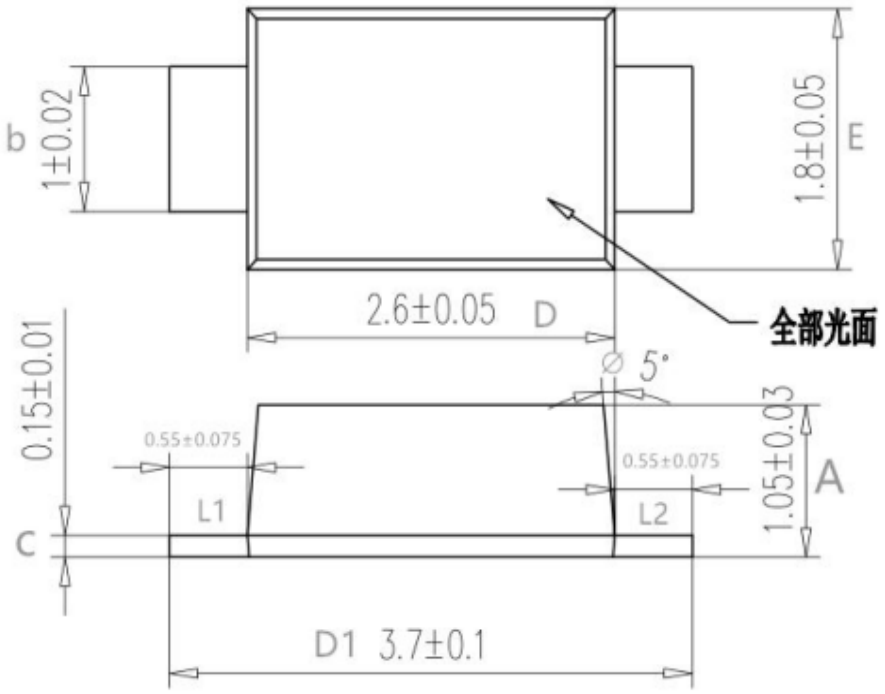


FIG.4: Typical Reverse Characteristics



S22Q THRU S220Q



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
Ø	4°	6°
带*为检验尺寸		