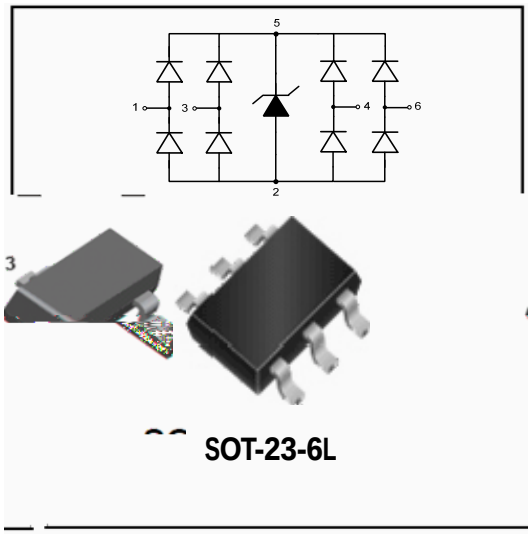
RoHS
COMPLIANT



- S) W \ S
”/RZ OHDNDJH5FXUUHQW QSW ,
”/RZ FODPSLQJ &YROWDJH S9 # ,$
7/3
” 6ROLG VWDWH VLOLFRQ WHFKQRORJ\

- : SOT-23-6L
- : Tin plated leads, solderabl per J-STD-002 and JESD22-B102
- Cathode line denotes the cathode end
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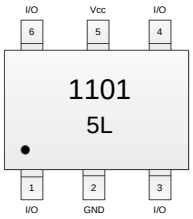

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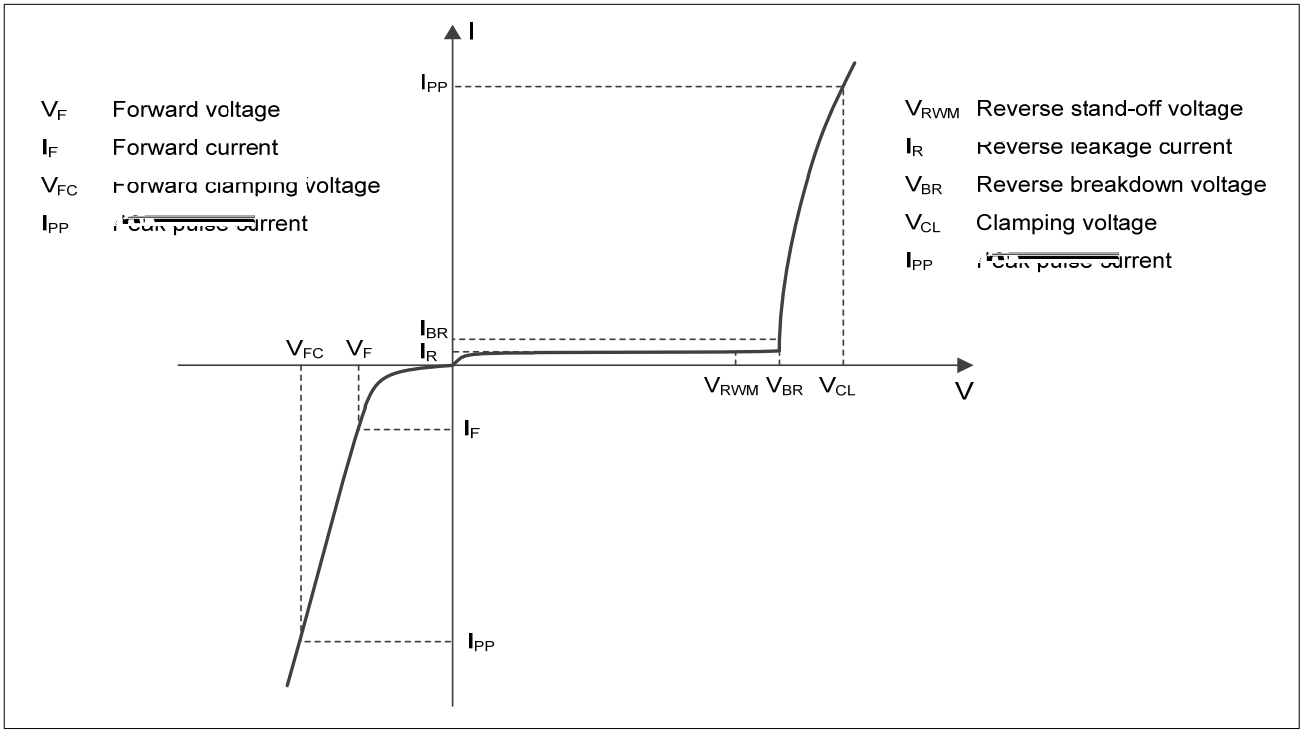

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Peak pulse power (t_p = 8/20μs)	P_{pk}	42	W
Peak pulse current (t_p = 8/20μs)	I_{PP}	3.5	A
ESD according to IEC61000-4-2 air discharge	V_{ESD}	±20	KV
ESD according to IEC61000-4-2 contact discharge		±20	
Junction temperature	T_J	125	°C
Operating temperature	T_{OP}	-40~85	°C
Storage temperature	T_{STG}	-55~150	°C

■ T_a=25 ł Unless otherwise specified

Reverse maximum working voltage	V_{RWM}	V				5
Reverse leakage current	I_R	nA	V_{RWM} = 5V		<1	100
Reverse breakdown voltage	$V_{(BR)}$	V	I_T = 1mA	7	8	9
Forward voltage	V_F	V	I_T = 10mA	0.6	0.9	1.2
Clamping voltage *1)*	V_{CL}	V	I_{PP} = 16A, t_p = 100ns		14	
Dynamic resistance *1)*	R_{DYN}	Ω			0.33	
Clamping voltage *2)*	V_{CL}	V	V_{ESD} = 8kV		14	
Clamping voltage *3)*	V_{CL}	V	I_{PP} = 1A, t_p = 8/20μs			10
		V	I_{PP} = 3.5A, t_p = 8/20μs			12
Junction capacitance	CJ	pF	V_R = 0V, f = 1MHz Any I/O pin to GND		0.4	0.65
			V_R = 0V, f = 1MHz Between any I/O pin		0.25	0.4

Notes:

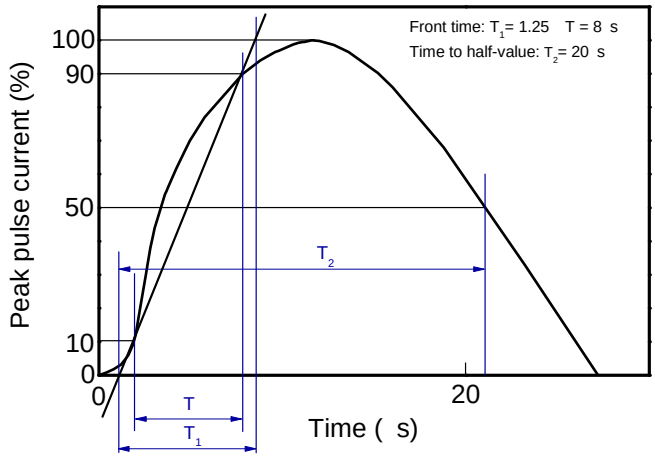
1) TLP parameter: Z_0 = 50Ω, t_p = 100ns, t_r = 2ns, averaging window from 60ns to 80ns. R_{DYN} is calculated from 4A to 16A.
2) Contact discharge mode, according to IEC61000-4-2.
3) Non-repetitive current pulse, according to IEC61000-4-5.

■ (Example)

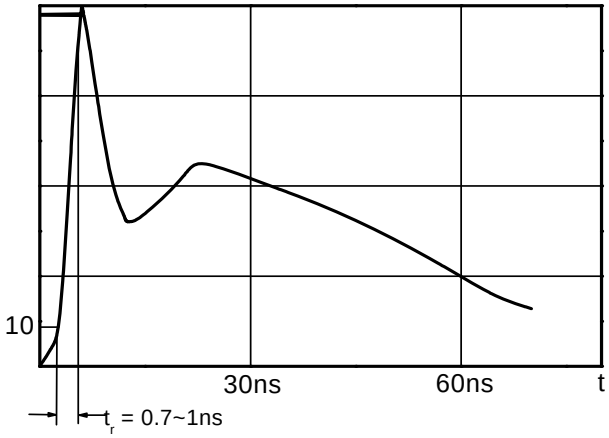
ESDSLC5V0E	3000	30000	120000	7 reel

■ (Typical)

8/20μs waveform per IEC61000-4-5



Contact discharge current waveform per IEC61000-4-2



Clamping voltage vs. Peak pulse current

Capacitance vs. Reverse voltage

Non-repetitive peak pulse power vs. Pulse time

Power derating vs. Ambient temperature

ESD clamping
(+8kV contact discharge per IEC61000-4-2)

ESD clamping
(-8kV contact discharge per IEC61000-4-2)

TLP Measurement

■

Symbol	Dimensions in Millimeters		
	Min.	Typ.	Max.
A	1.05	-	1.45
A1	0	-	0.15
A2	0.90	1.10	1.30
b	0.30	0.40	0.50
c	0.10	-	0.21
D	2.72	2.92	3.12
E	2.60	2.80	

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