

Features

- · Solid-state silicon technology
- Protects 4 I/O Lines
- · Low Capacitance
- Low Clamping Voltage
- · Low leakage current
- · Moisture Sensitivity Level 1
- · Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

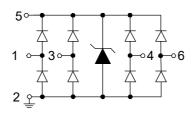
JE004000 4 0/E0D)	Air	±25KV		
IEC61000-4-2(ESD)	Contact	±25KV		
Peak Pulse Power (8/20µs)	PPK	54W		
Peak Pulse Current (8/20µs)(Note 2)	lpp	4.5A		
Operating Junction Temperature Range	ТЈ	-40°C to +125°C		
Storage Temperature Range	TSTG	-55°C to +150°C		

Note:

Marking Information

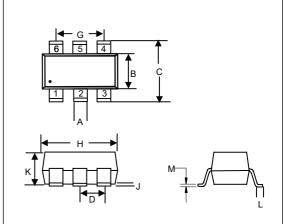


Internal Structure



ESD Protection Device

SOT23-6L



DIMENSIONS					
DIM INCHES		MM		NOTE	
DIIVI	MIN MA		MIN	MAX	NOTE
Α	0.012	0.020	0.30	0.50	
В	0.051	0.070	1.30	1.80	
С	0.087	0.126	2.20	3.20	
D	0.037		0.95		TYP.
G	0.074		1.90		TYP.
Н	0.106	0.122	2.70	3.10	
J	0.002	0.006	0.05	0.15	
K	0.030	0.051	0.75	1.30	
L	0.012	0.024	0.30	0.60	
М	0.003	0.008	0.08	0.22	

^{1.} Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

^{2.}Non-repetitive current pulse 8/20 µs exponential decay waveform according to IEC61000-4-5.



Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
/O Pins						
Reverse Working Voltage	V_{RWM}				5	V
Reverse Breakdown Voltage	V_{BR}	I _T =1mA	7		9	V
Reverse Leakage Current	I _R	V _{RWM} =5V			100	nA
Forward Voltage	V _F	I _T = 10mA	0.6	0.9	1.2	V
Clamping Voltage ^(Note 1)	V _C	V _{ESD} =8KV		13		V
Clamping Voltage ^(Note 2)	V _C	I _{PP} =1A, t _P =8/20μs		7.8	9	V
Clamping Voltage ^(Note 2)	V _C	I _{PP} =4.5A, t _P =8/20μs		10	12	V
Junction Capacitance	CJ	V _R =0V, f=1MHz, Any I/O pin to GND		0.5	0.7	pF
Junction Capacitance	CJ	V _R =0V, f=1MHz, Between any I/O pins		0.2	0.4	pF
Dynamic Resistance ^(Note 3)	R _{DYN}	t _P =100ns		0.31		Ω
/DD Pins Reverse Working Voltage	V_{RWM}				5.5	V
Reverse Breakdown Voltage	V _{BR}	I _{BR} =1mA	7		8.5	V
Reverse Leakage Current	I _R	V _{RWM} =5.5V			100	nA
Forward Voltage	V _F	I _F = 10mA	0.6	0.9	1.2	V
Clamping Voltage ^(Note 1)	V _C	V _{ESD} =8KV		10		V
Clamping Voltage ^(Note 2)	V _C	I _{PP} =1A, t _P =8/20μs		7.8	9	V
Clamping Voltage ^(Note 2)	V _C	I _{PP} =15A, t _P =8/20μs		11.2	13	V
Dynamic Resistance ^(Note 3)	R _{DYN}	t _P =100ns		0.20		Ω

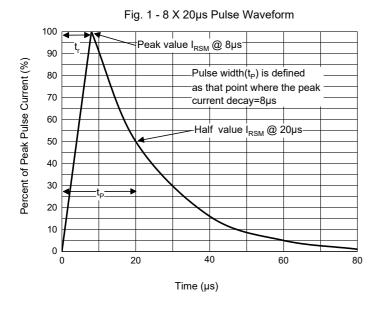
Note:

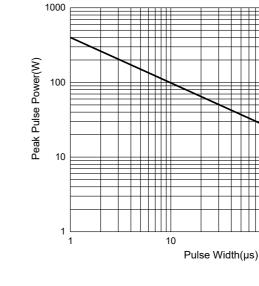
- 1. Contact Discharge Mode, According to IEC61000-4-2.
- 2. Non-repetitive Current Pulse, According to IEC61000-4-5.
- 3. TLP Parameter: $Z0=50\Omega$, tp=100ns, tr=2ns, Averaging Window from 60ns to 80ns. RDYN is Calculated from 4A to 16A.

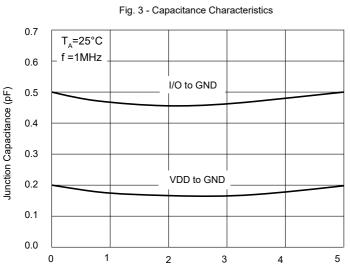
1000

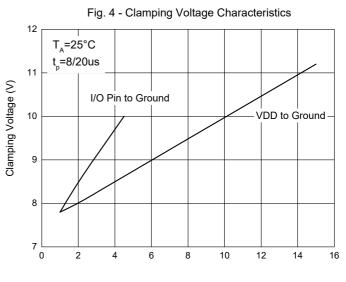


Curve Characteristics





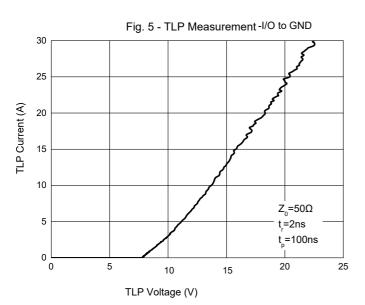




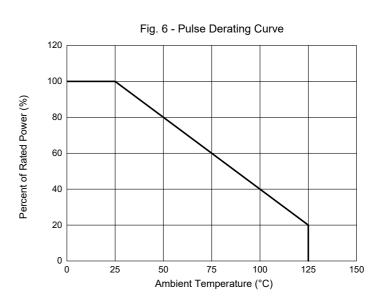
Reverse Peak Pulse Current (A)

Fig. 2 - Non-Repetitive Peak Pulse Power

100



Reverse Voltage (V)





Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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