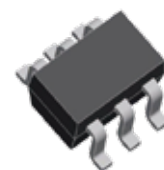


FEATURES

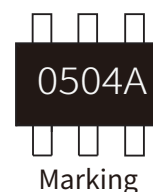
- Ultra low leakage: nA level
- Ultra low capacitance: 0.6pF typical (I/O-GND)
- Low operating voltage: 5.0V
- Up to 4 data lines and one power line protects
- Low clamping voltage

APPLICATIONS

- Monitors and flat panel displays
- Set-top box and Digital TV
- Video graphics cards
- Digital Video Interface (DVI)
- Notebook Computers
- PCI Express and Serial SATA Ports



SOT-23-6L



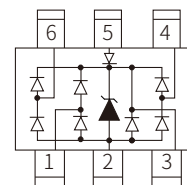
Marking

IEC COMPATIBILITY

- IEC61000-4-2 (ESD) $\pm 20\text{kV}$ (air), $\pm 15\text{kV}$ (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)

APPROVALS

RoHS	Compliance with 2011/65/EU
HF	Compliance with IEC61249-2-21:2003



Schematic Symbol

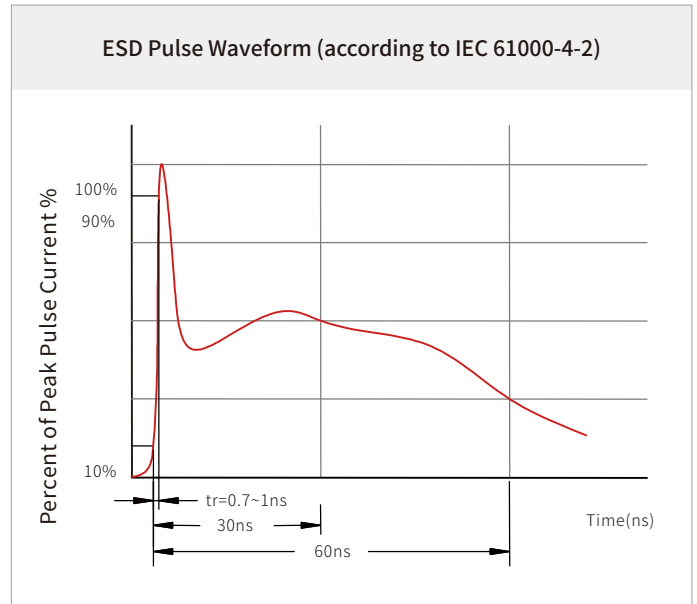
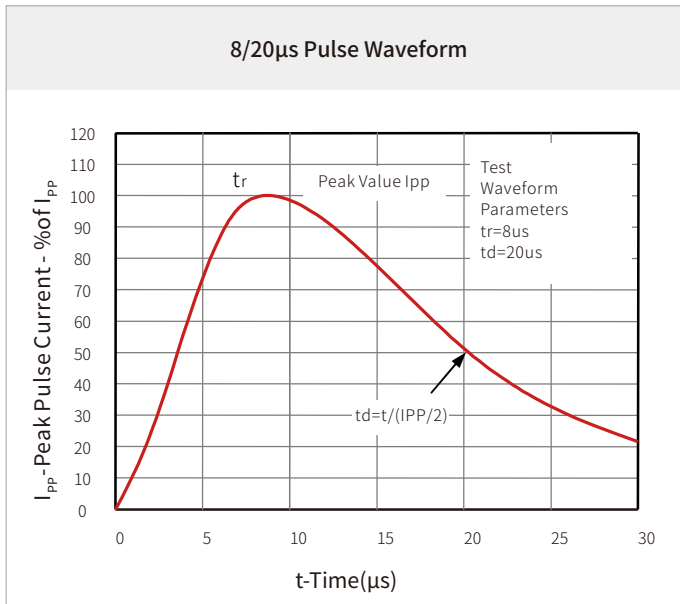
THERMAL CONSIDERATIONS

Symbol	Parameter	Value	Unit
P_{PP}	Peak Pulse Power (tp=8/20 μ s waveform)	40	Watts
T_J	Operating Temperature Range	-55 to +125	$^{\circ}\text{C}$
T_{STG}	Storage Temperature Range	-55 to +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS

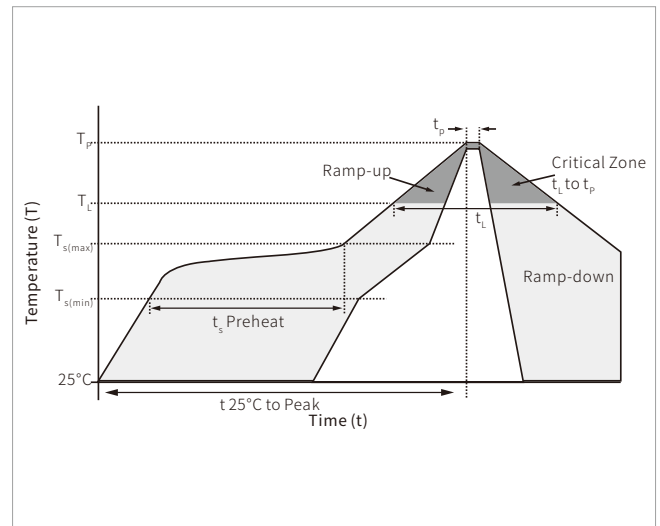
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{RWM}	Reverse Stand-off Voltage	Pin 5 to GND, I/O-GND			5	V
V_{BR1}	Reverse Breakdown Voltage	$I_T=1\text{mA}$ (Pin 5 to GND, I/O-GND)	6.0	7.5	8.5	V
I_R	Reverse Leakage Current	$V_{RWM}=5\text{V}$ (Pin 5 to GND, I/O-GND)			0.5	μA
V_{BR2}	Reverse Breakdown Voltage	$I_T=1\text{mA}$ (I/O to Pin 5)	6.0	7.5	8.5	V
I_{R2}	Reverse Leakage Current	$V_{RWM}=5\text{V}$ (I/O to Pin 5)			0.5	μA
V_F	Forward Breakdown Voltage	$I_F=15\text{mA}$, (GND to Pin 5/I/O)		0.8	1.3	μA
V_C	Clamping Voltage	$I_{PP}=3\text{A}$, tp=8/20 μ s (I/O to GND)		11.5	13.0	V
V_C	Clamping Voltage	$I_{PP}=7\text{A}$, tp=8/20 μ s (pin 5 to GND)		13.0	16.0	V
C_J	Off State Junction Capacitance	$V_{pin5}=5\text{V}$, I/O=0V, f=1MHz, I/O-GND		0.6	1.0	pF
C_J	Off State Junction Capacitance	$V_{pin5}=5\text{V}$, I/O=0V, f=1MHz, I/O-I/O pins		0.3	0.5	pF

CHARACTERISTIC CURVES

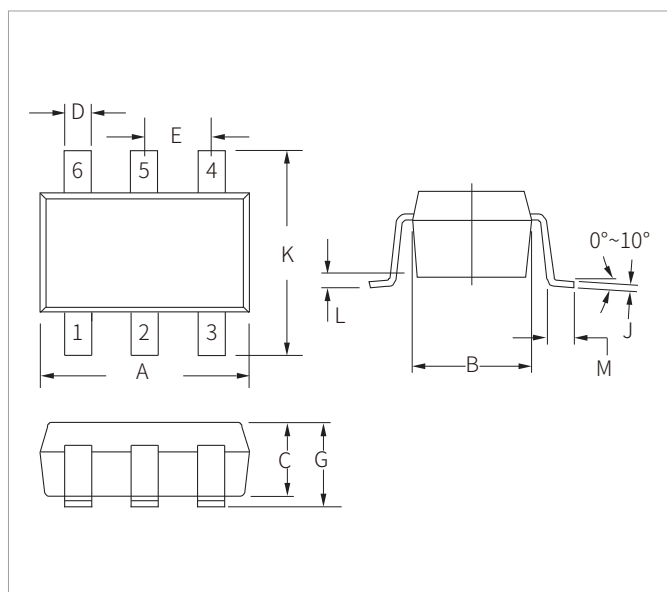


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak)		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C

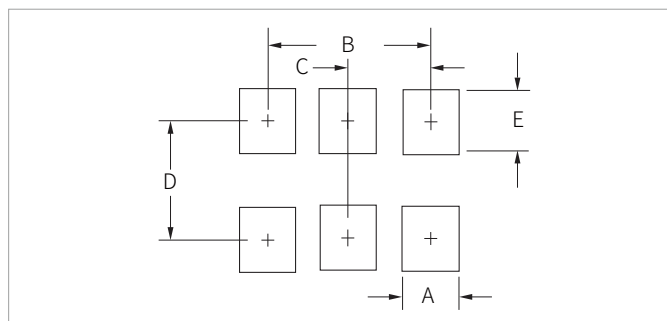


SOT-23-6L PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.80	3.10	0.110	0.125
B	1.50	1.80	0.059	0.071
C	0.90	1.30	0.036	0.051
D	0.25	0.50	0.010	0.020
E	0.85	1.05	0.033	0.040
G	0.90	1.45	0.036	0.057
J	0.09	0.20	0.003	0.008
K	2.60	3.00	0.102	0.118
L	0.0	0.15	0.0	0.006
M	0.30	0.60	0.012	0.024

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters	Inches
	Nominal	Nominal
A	0.70	0.028
B	1.90	0.074
C	0.95	0.037
D	2.40	0.094
E	1.00	0.039

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SESRV05-4B	SOT-23-6L	3000PCS	7"

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By QR Code

Website



Wechat

To find your local partner within Semiware's global website: www.semiware.com

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