

FEATURES

- | 78W Peak Pulse Power per Line (tp=8/20μs)
- | Protects Four I/O Lines
- | Low Clamping Voltage

APPLICATIONS

- | CCTV Cameras
- | 10/100/1000 Ethernet
- | Integrated magnetics
- | Access Equipment
- | Central Office Equipment
- | Customer Premise Equipment
- | xDSL Interfaces



SOT-23-5



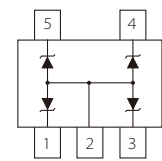
Marking

IEC COMPATIBILITY

- | IEC61000-4-2 (ESD) ±30kV (air), ±30kV (contact)
- | IEC61000-4-4 (EFT) 40A (5/50ns)

APPROVALS

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



Schematic Symbol

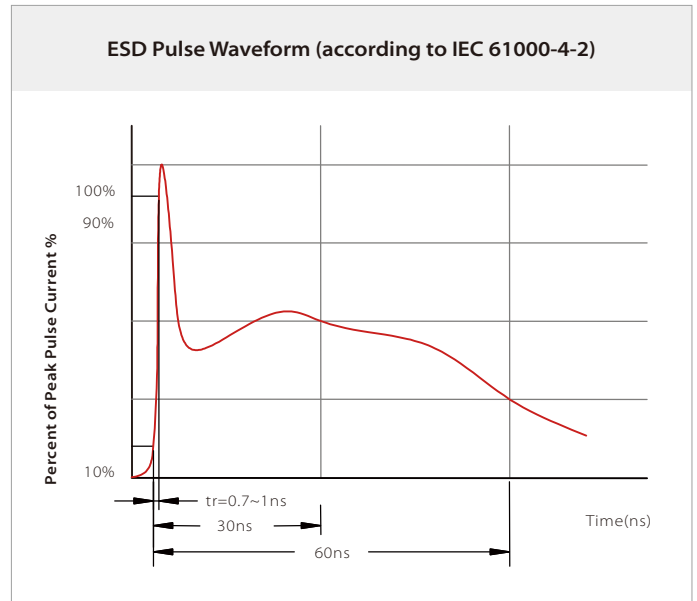
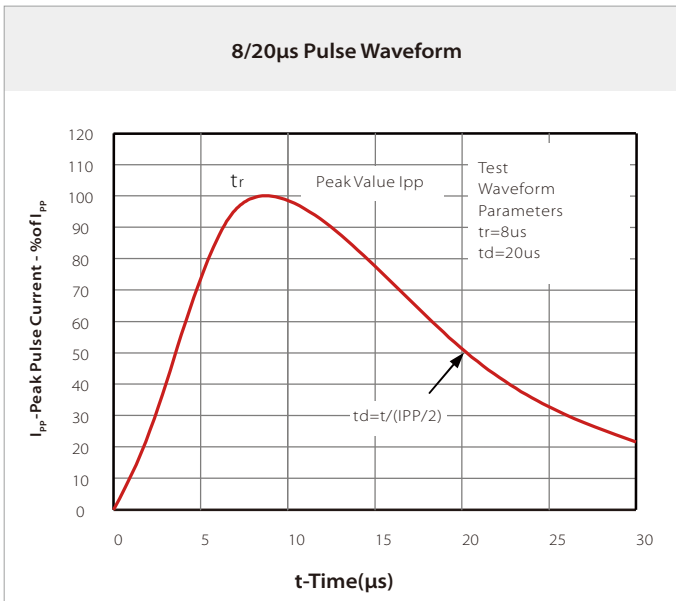
THERMAL CONSIDERATIONS

Symbol	Parameter	Value	Unit
P_{PP}	Peak Pulse Power (tp=8/20μs waveform)	78	Watts
T_J	Operating Temperature Range	-40 to +125	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

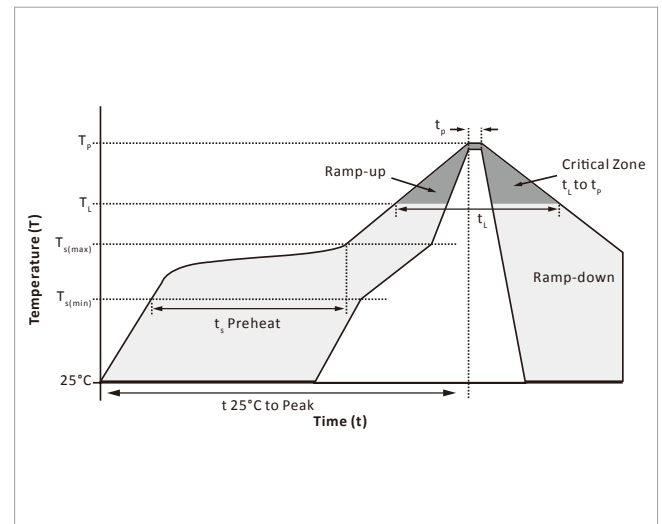
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{RWM}	Reverse Stand-off Voltage				3.6	V
V_{BR}	Reverse Breakdown Voltage	$I_T=1\text{mA}$	4.5			V
I_R	Reverse Leakage Current	$V_{RWM}=3.6\text{V}$			0.1	μA
V_C	Clamping Voltage (Tp=8/20us)	$I_{pp}=1\text{A}, tp=8/20\text{us}$			7.5	V
V_C	Clamping Voltage (Tp=8/20us)	$I_{pp}=10\text{A}, tp=8/20\text{us}$			7	V
V_C	Clamping Voltage (Tp=8/20us)	$I_{pp}=12\text{A}, tp=8/20\text{us}$			6.5	V
I_{pp}	Peak Pulse Current (Tp=8/20us)	tp=8/20us			12	A
C_J	Off State Junction Capacitance	$V_R=0\text{V}, f=1\text{MHz}$ IO to GND		1.2		pF
C_J	Off State Junction Capacitance	$V_R=0\text{V}, f=1\text{MHz}$ IO to IO		0.6		pF

CHARACTERISTIC CURVES

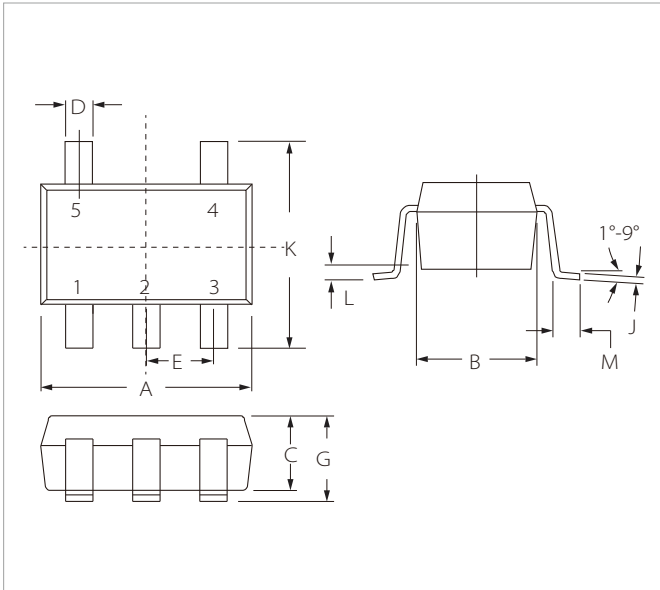


SOLDERING PARAMETERS

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_p)	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

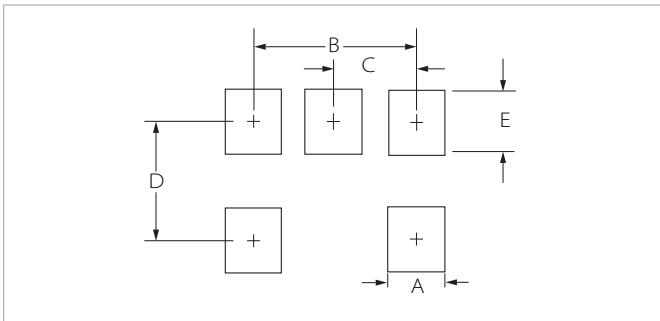


SOT-23-5 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.80	3.10	0.110	0.122
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	0.95(Typ)		0.037(Typ)	
G	0.90	1.40	0.036	0.055
J	0.08	0.25	0.003	0.010
K	2.60	3.00	0.102	0.118
L	0.00	0.10	0.00	0.004
M	0.37	2.64	0.014	-

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
SE25T10U3.6MD	SOT-23-5	3000PCS	7"

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