

FEATURES

- | 100 Watts Peak Pulse Power per Line ($t_p=8/20\mu s$)
- | Solid-state silicon-avalanche technology
- | Low operating and clamping voltages
- | Protects four I/O lines
- | Working Voltages :5 V
- | Low Leakage Current

APPLICATIONS

- | Cellular Handsets & Accessories
- | Personal Digital Assistants(PDAs)
- | Notebooks & Handhelds
- | Portable Instrumentation
- | Digital Cameras
- | MP3 Player



SOT-363



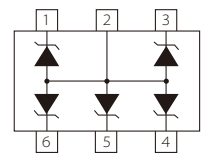
Marking

IEC COMPATIBILITY

- | IEC61000-4-2 (ESD) $\pm 15kV$ (air), $\pm 8kV$ (contact)
- | IEC61000-4-4 (EFT) 40A (5/50ns)

APPROVALS

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



Schematic Symbol

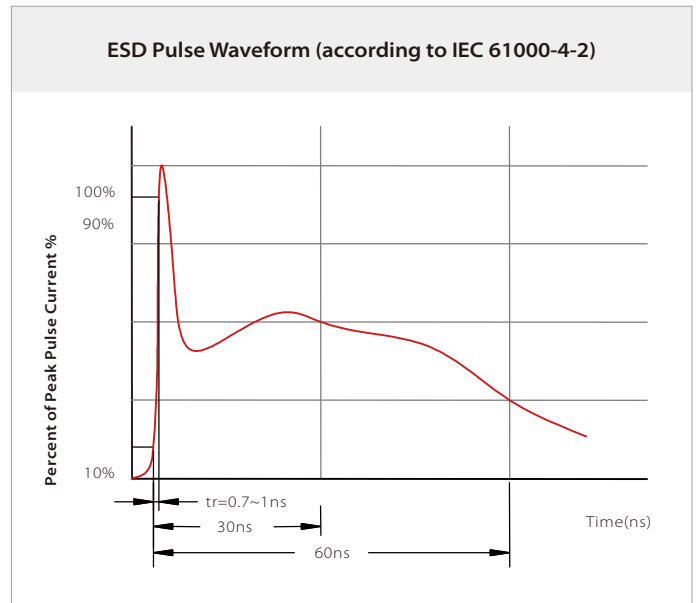
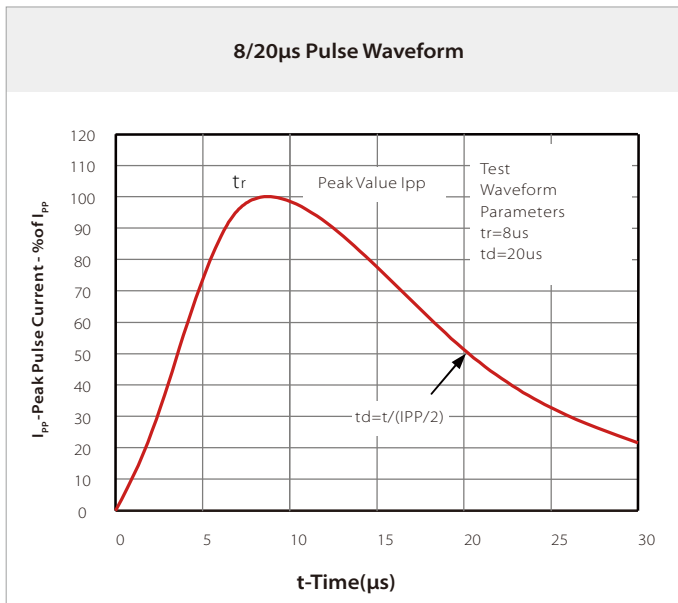
THERMAL CONSIDERATIONS

Symbol	Parameter	Value	Unit
P_{PP}	Peak Pulse Power ($t_p=8/20\mu s$ waveform)	100	Watts
T_J	Operating Temperature Range	-55 to +125	$^{\circ}C$
T_{STG}	Storage Temperature Range	-55 to +150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS

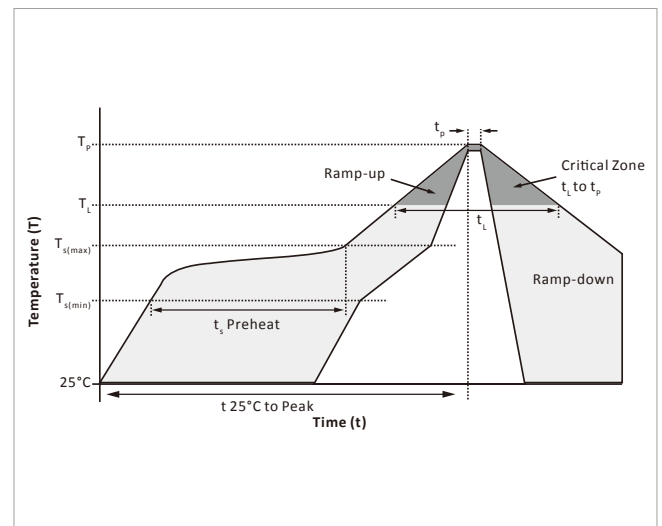
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{RWM}	Reverse Stand-off Voltage				5	V
V_{BR}	Reverse Breakdown Voltage	$I_T=1mA$	6			V
I_R	Reverse Leakage Current	$V_{RWM}=5V$			1	μA
V_C	Clamping Voltage ($T_p=8/20\mu s$)	$I_{pp}=1A, t_p=8/20\mu s$			9.8	V
V_C	Clamping Voltage ($T_p=8/20\mu s$)	$I_{pp}=7.5A, t_p=8/20\mu s$			12	V
I_{pp}	Peak Pulse Current ($T_p=8/20\mu s$)	$t_p=8/20\mu s$			7.5	A
C_J	Off State Junction Capacitance	$V_R=0V, f=1MHz$			60	pF

CHARACTERISTIC CURVES

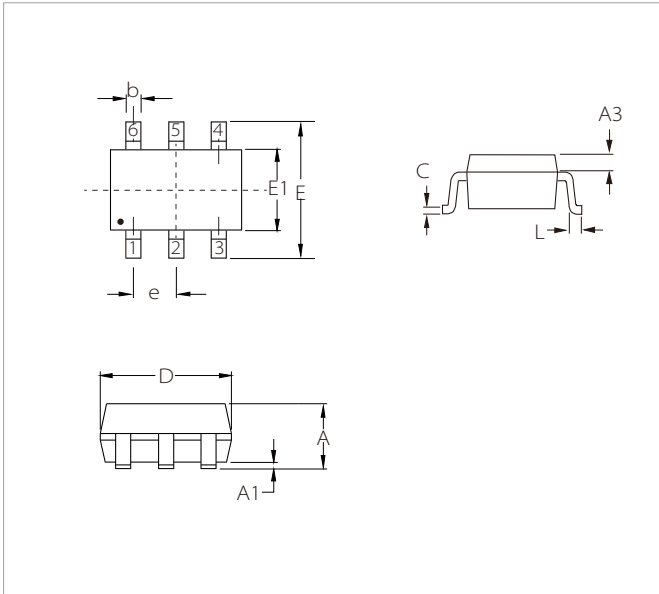


SOLDERING PARAMETERS

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

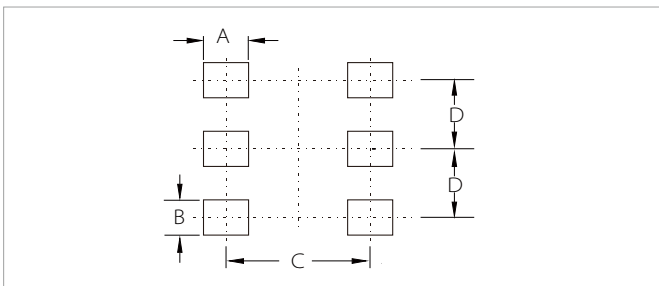


SOT-363 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	0.800	1.100	0.031	0.043
A1	0.000	0.100	0.000	0.004
A3	0.20REF		0.008REF	
D	1.800	2.200	0.070	0.086
E1	1.150	1.350	0.045	0.053
E	2.000	2.200	0.078	0.086
e	0.65BSC		0.026BSC	
b	0.100	0.300	0.004	0.012
L	0.100	0.300	0.004	0.012
C	0.100	0.250	0.004	0.010

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters	Inches
A	0.50	0.0197
B	0.40	0.0157
C	1.90	0.0748
D	0.65	0.0250

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SE63T10U5.0E	SOT-363	3000PCS	7"

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