

FEATURES

- | Low capacitance of 0.65pF (TYP) per I/O
- | Low leakage current of 0.5μA (MAX) at 6V
- | Complete line of small packaging helps save board space SOT-353

APPLICATIONS

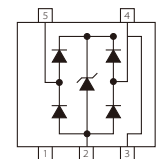
- | LCD/ PDP TVs
- | DVD Players
- | Desktops
- | MP3/ PMP
- | Digital Cameras
- | Digital Cameras
- | Mobile Phones
- | Notebooks
- | Computer Peripherals



SOT-353



Marking



Schematic Symbol

IEC COMPATIBILITY

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

APPROVALS

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

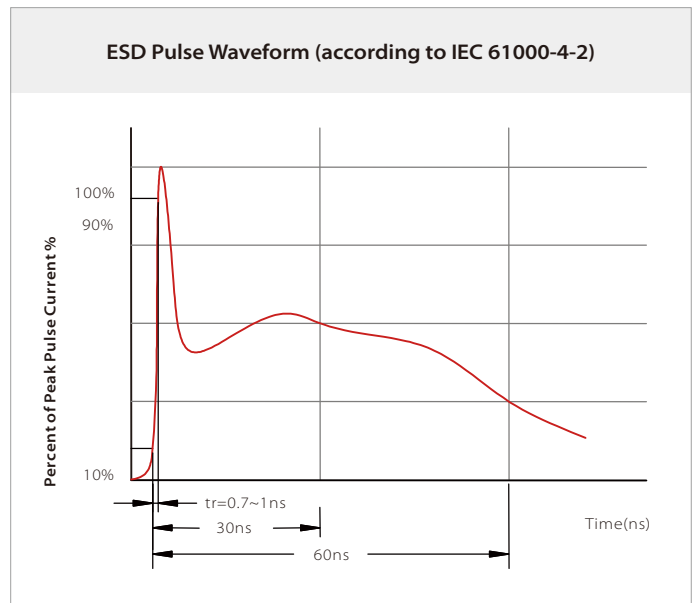
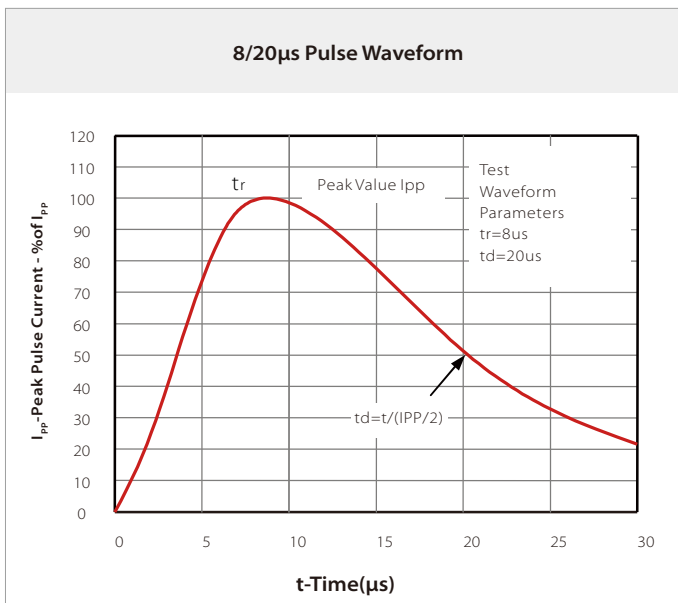
THERMAL CONSIDERATIONS

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

ELECTRICAL CHARACTERISTICS

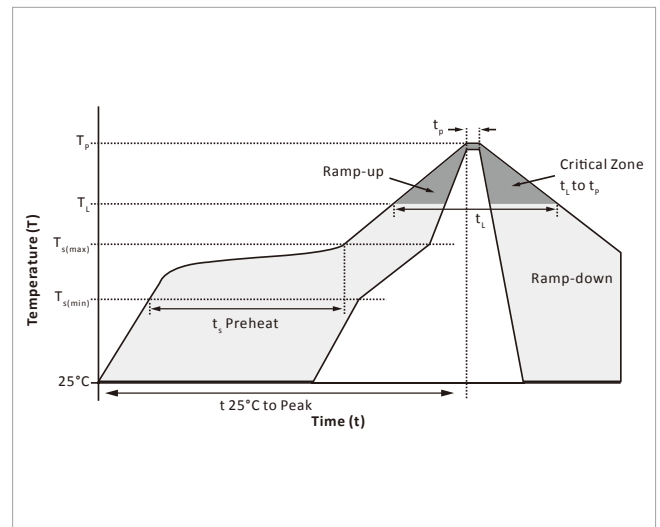
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{RWM}	Reverse Stand-off Voltage				6	V
V_{BR}	Reverse Breakdown Voltage	$I_T=1\text{mA}$	7			V
I_R	Reverse Leakage Current	$V_{RWM}=6\text{V}$			0.5	μA
V_C	Clamping Voltage ($T_p=8/20\mu\text{s}$)	$I_{pp}=1\text{A}, t_p=8/20\mu\text{s}$		10	12	V
V_C	Clamping Voltage ($T_p=8/20\mu\text{s}$)	$I_{pp}=2\text{A}, t_p=8/20\mu\text{s}$		11.8	15	V
I_{pp}	Peak Pulse Current ($T_p=8/20\mu\text{s}$)	$t_p=8/20\mu\text{s}$			2	A
C_j	Off State Junction Capacitance	Reverse Bias=0V I/O-GND	0.7	0.8	0.95	pF
C_j	Off State Junction Capacitance	Reverse Bias=1.65V I/O-GND	0.55	0.65	0.8	pF
C_j	Off State Junction Capacitance	Reverse Bias=0V I/O-I/O		0.35		pF

CHARACTERISTIC CURVES

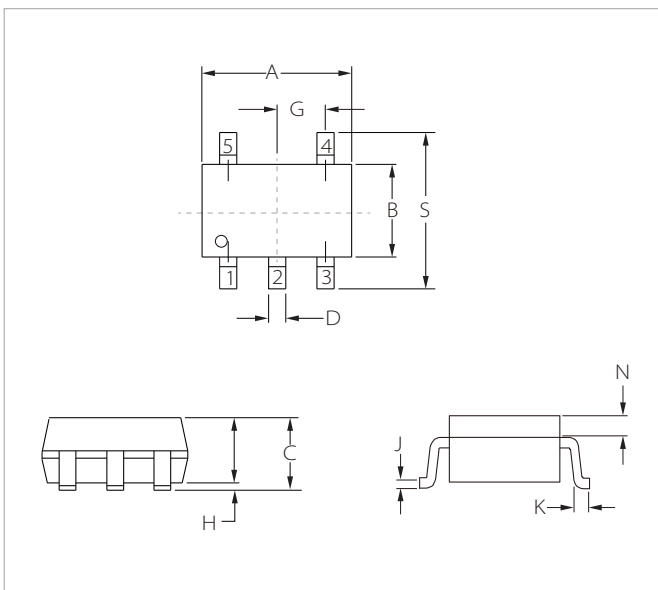


SOLDERING PARAMETERS

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_2)	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_1)	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

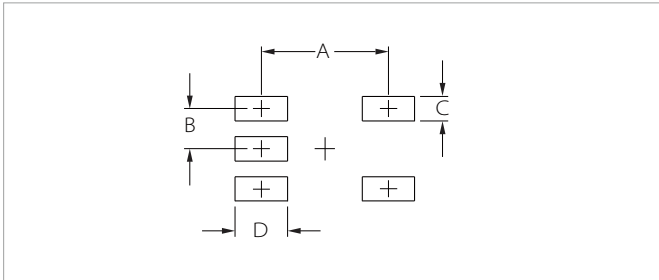


SOT-353 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.80	2.20	0.071	0.087
B	1.15	1.35	0.045	0.053
C	0.80	1.10	0.031	0.043
D	0.10	0.30	0.004	0.012
G	0.65BSC		0.26BSC	
H	--	0.10	--	0.004
J	0.10	0.25	0.004	0.010
K	0.10	0.30	0.004	0.012
N	0.20REF		0.008REF	
S	2.0	2.2	0.079	0.087

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters	Inches
	NOR	NOR
A	1.90	0.0748
B	0.65	0.025
C	0.40	0.0157
D	0.50	0.0197

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
SE53T10U6.0MC	SOT-353	3000PCS	7"

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