

FEATURES

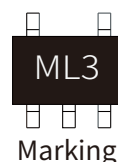
- | 78W Peak Pulse Power per Line (tp=8/20μs)
- | Protects Four I/O Lines
- | Low Clamping Voltage

APPLICATIONS

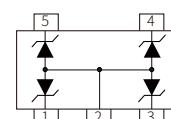
- | CCTV Cameras
- | 10/100/1000 Ethernet
- | Integrated magnetics
- | Access Equipment
- | Central Office Equipment
- | Customer Premise Equipment
- | xDSL Interfaces



SOT-353



Marking



Schematic Symbol

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

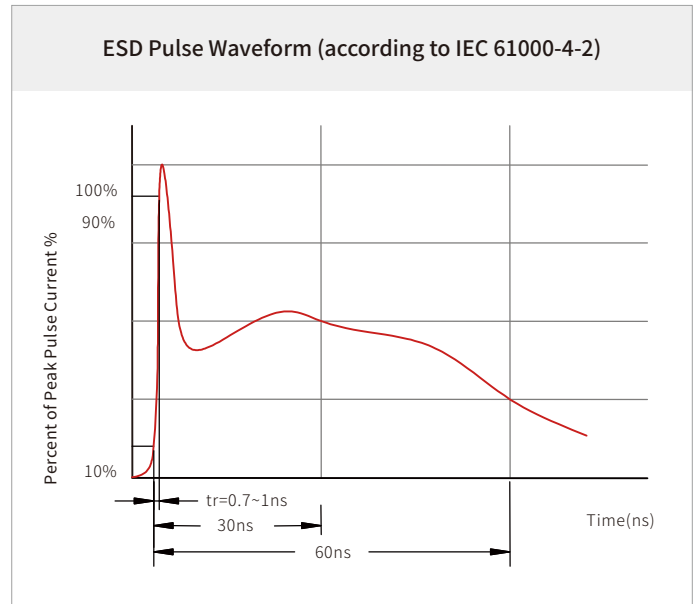
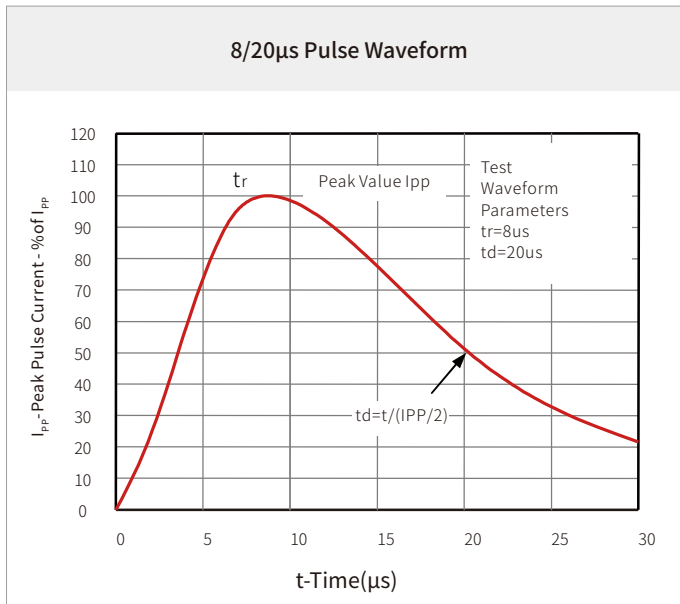
THERMAL CONSIDERATIONS

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

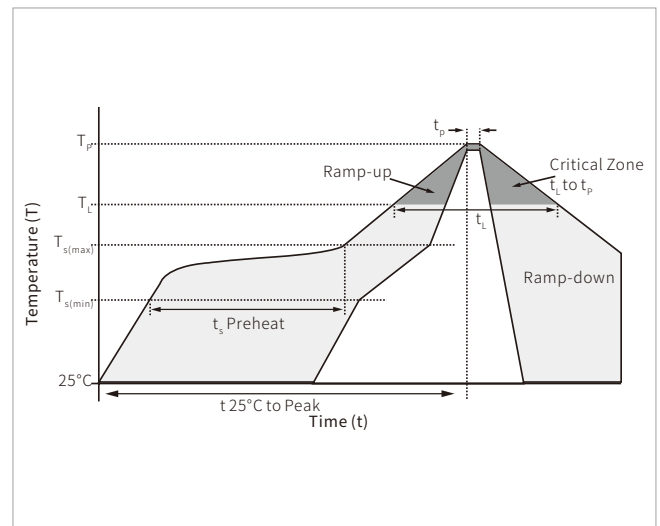
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{RWM}	Reverse Stand-off Voltage				3.6	V
V_{BR}	Reverse Breakdown Voltage	$I_T=1mA$	4.5			V
I_R	Reverse Leakage Current	$V_{RWM}=3.6V$			0.1	μA
V_C	Clamping Voltage	$I_{PP}=1A, tp=8/20\mu s$			7.5	V
V_C	Clamping Voltage	$I_{PP}=10A, tp=8/20\mu s$			7	V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

CHARACTERISTIC CURVES

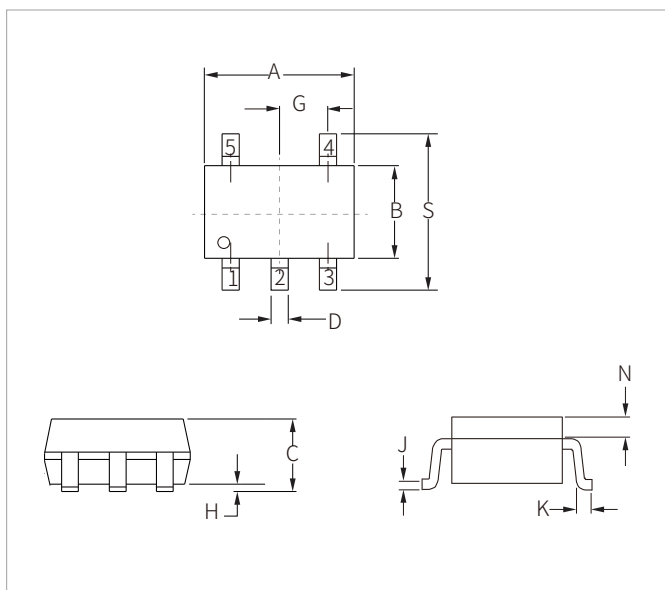


SOLDERING PARAMETERS

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_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

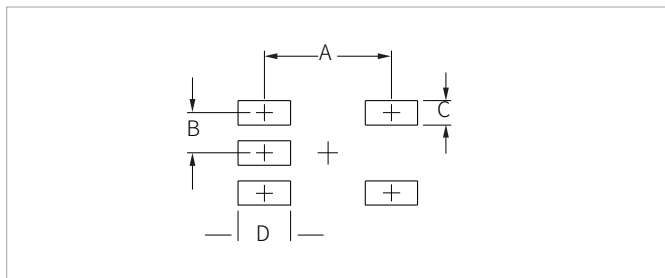


SOT-353 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.80	2.20	0.071	0.087
B	1.10	1.40	0.043	0.055
C	0.80	1.20	0.031	0.047
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
SE53T10U3.6MD	SOT-353	3000PCS	7"

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By QR Code

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