

FEATURES

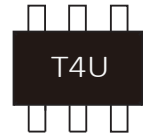
- | 153W Peak Pulse Power (tp=8/20µs)
- | Protects Four I/O Unidirectional Lines
- | Working voltages : 24 V
- | Low Clamping Voltage
- | Meet AEC-Q101 Requirements

APPLICATIONS

- | Industrial Equipment
- | Multi-protocol serial transceivers
- | Microprocessor-based equipment
- | Automotive Applications
- | WAN/LAN Equipment
- | Serial and parallel ports
- | RF signal lines



SOT-23-6



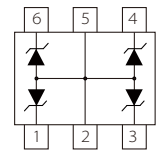
Marking

IEC COMPATIBILITY

- | IEC61000-4-2 (ESD) ±25kV (air), ±20kV (contact)
- | IEC61000-4-4 (EFT) 40A (5/50ns)

APPROVALS

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



Schematic Symbol

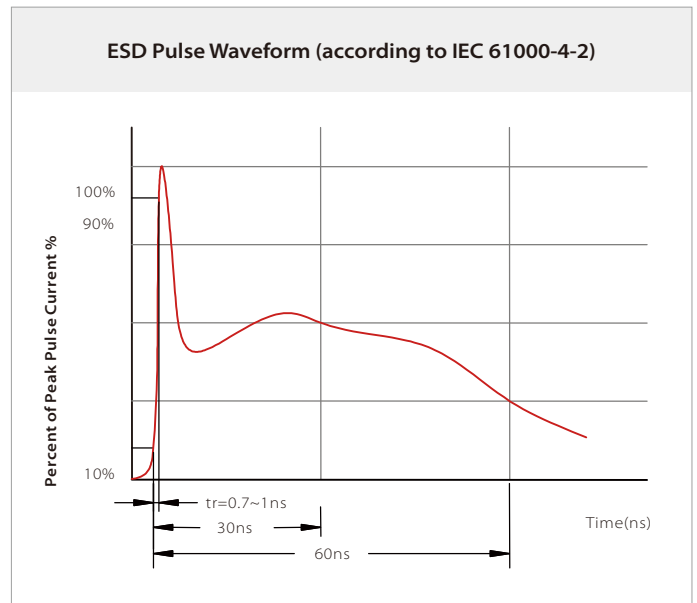
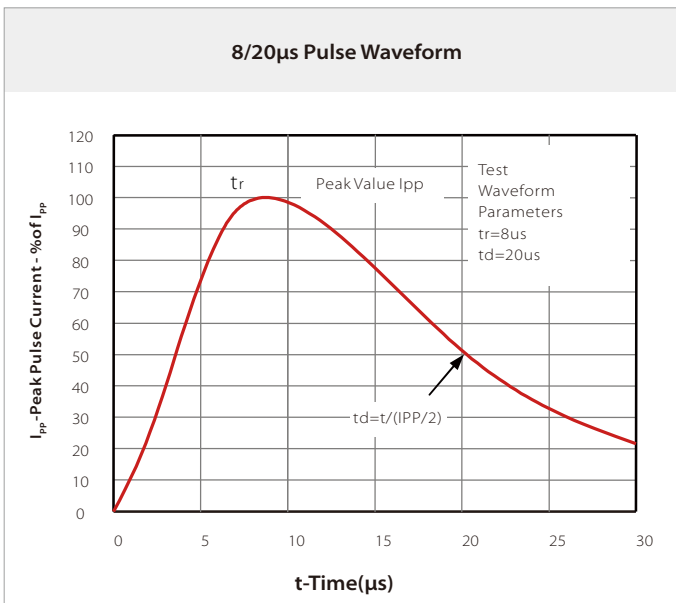
THERMAL CONSIDERATIONS

Symbol	Parameter	Value	Unit
P_{PP}	Peak Pulse Power (tp=8/20µs waveform)	153	Watts
T_J	Operating Temperature Range	-40 to +125	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C
T_L	Lead Soldering Temperature	260 (10 sec.)	°C

ELECTRICAL CHARACTERISTICS

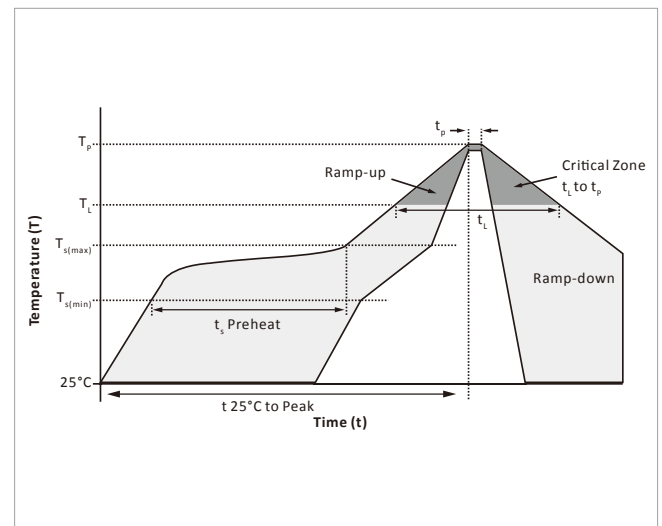
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{RWM}	Reverse Stand-off Voltage				24	V
V_{BR}	Reverse Breakdown Voltage	$I_T=1\text{mA}$	25.7		29.4	V
I_R	Reverse Leakage Current	$V_{RWM}=24\text{V}$			0.1	µA
V_C	Clamping Voltage (Tp=8/20us)	$I_{pp}=1\text{A}, tp=8/20\text{us}$			31.5	V
V_C	Clamping Voltage (Tp=8/20us)	$I_{pp}=2\text{A}, tp=8/20\text{us}$			36	V
V_C	Clamping Voltage (Tp=8/20us)	$I_{pp}=3.4\text{A}, tp=8/20\text{us}$			45	V
I_{pp}	Peak Pulse Current (Tp=8/20us)	tp=8/20us			3.4	A
C_J	Off State Junction Capacitance	$V_R=0\text{V}, f=1\text{MHz}$		23		pF

CHARACTERISTIC CURVES

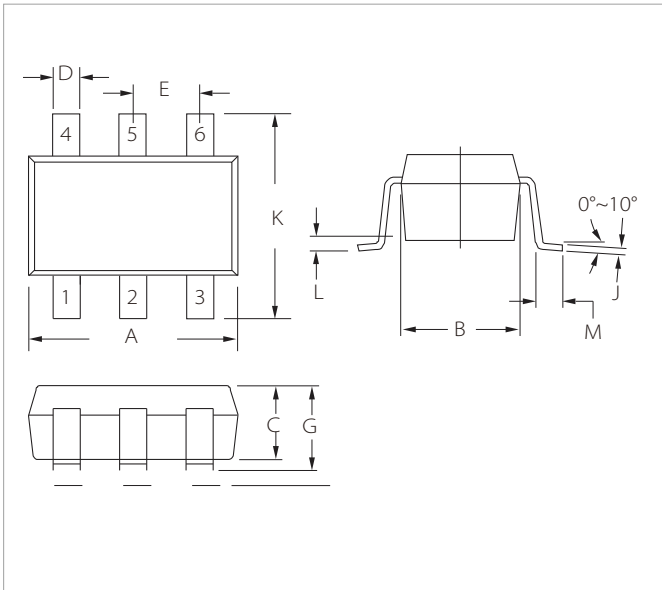


SOLDERING PARAMETERS

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

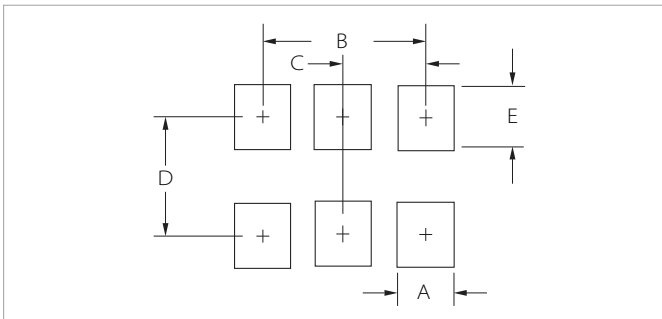


SOT-23-6 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	2.70	3.05	0.106	0.120
B	1.30	1.80	0.052	0.071
C	0.90	1.30	0.036	0.051
D	0.20	0.50	0.008	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	2.50	3.10	0.099	0.122
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
TPSE26T15U24A	SOT-23-6	3000PCS	7"

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