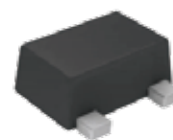


FEATURES

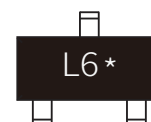
- | 49W Peak Pulse Power per Line (tp=8/20μs)
- | Ultra low leakage: nA level
- | Low clamping voltage
- | Halogen Compliant
- | Meet AEC-Q101 Requirements

APPLICATIONS

- | Serial ATA
- | Automobile Antenna
- | CAN Bus Ports
- | Cellular Handsets & Accessories
- | Wi-Fi Interfaces
- | FeliCa / RFID



SOT-723



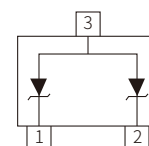
Marking

IEC COMPATIBILITY

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

APPROVALS

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



Schematic Symbol

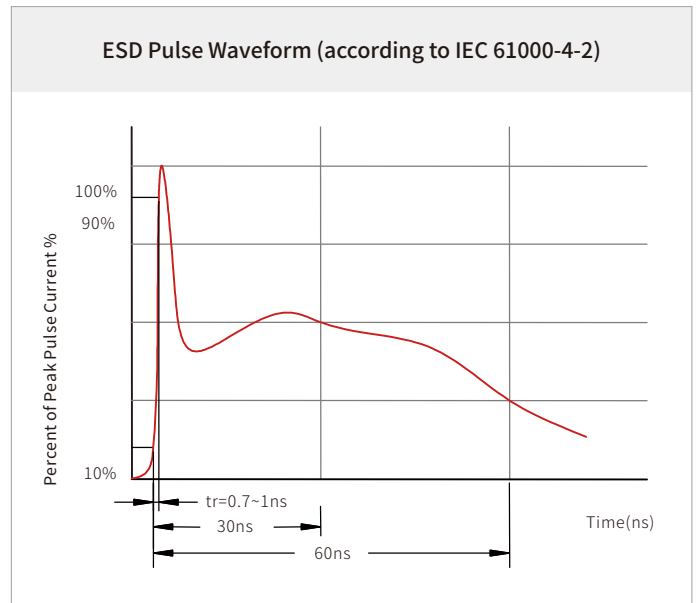
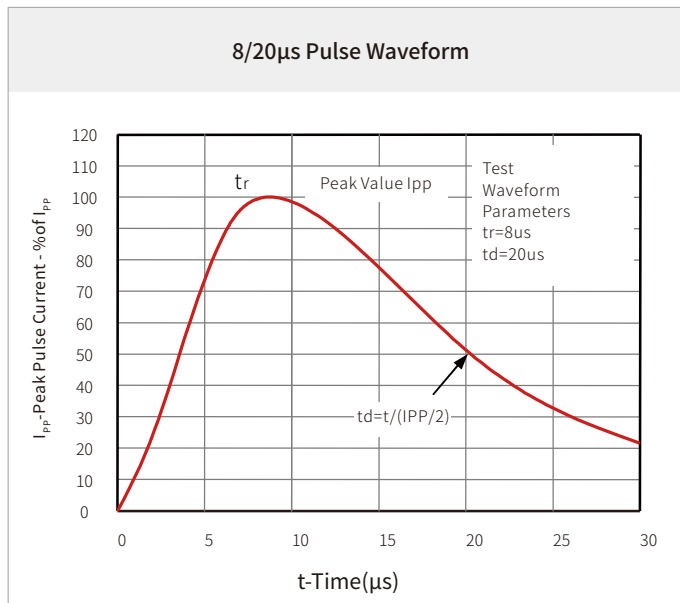
THERMAL CONSIDERATIONS

Symbol	Parameter	Value	Unit
P_{PP}	Peak Pulse Power (tp=8/20μs waveform)	49	Watts
T_J	Operating Temperature Range	-40 to +125	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

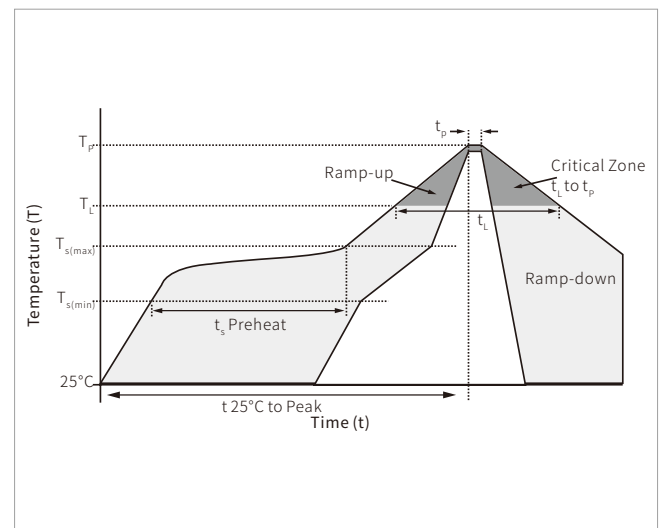
Symbol	Parameter	Condition	Min.	Typ.	Max.	Unit
V_{RWM}	Reverse Stand-off Voltage				5	V
V_{BR}	Reverse Breakdown Voltage	$I_T=1mA$	6	7.1	9	V
I_R	Reverse Leakage Current	$V_{RWM}=5V$		<10	100	nA
V_C	Clamping Voltage	$I_{PP}=1A, tp=8/20\mu s$		8	10	V
V_C	Clamping Voltage	$I_{PP}=3.5A, tp=8/20\mu s$		10	14	V
I_{PP}	Peak Pulse Current	$tp=8/20\mu s$			3.5	A
C_J	Off State Junction Capacitance	$V_R=0V, f=1MHz$		0.5	0.8	pF

CHARACTERISTIC CURVES

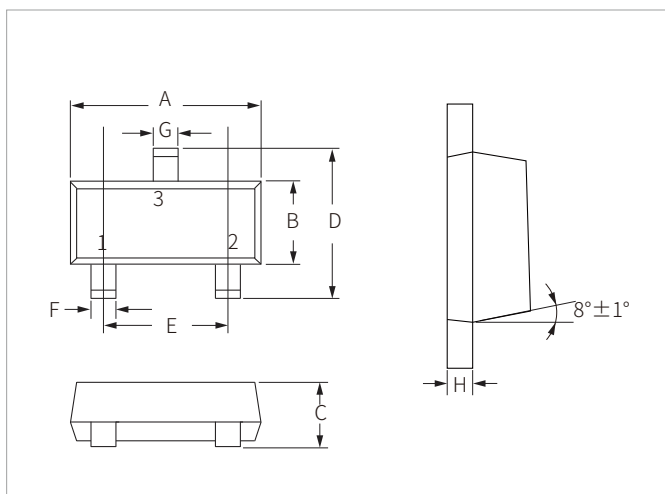


SOLDERING PARAMETERS

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

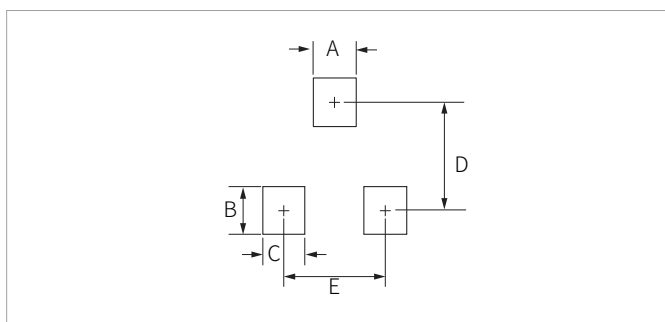


SOT-723 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.10	1.30	0.043	0.051
B	0.70	0.90	0.028	0.035
C	0.30	0.50	0.014	0.020
D	1.10	1.30	0.043	0.051
E	0.80TYP		0.031TYP	
F	0.175	0.25	0.007	0.010
G	0.225	0.30	0.009	0.012
H	0.09	0.13	0.003	0.005

RECOMMENDED PAD LAYOUT DIMENSIONS



Ref.	Millimeters	Inches
	Dimensions	Dimensions
A	0.50	0.020
B	0.45	0.018
C	0.40	0.016
D	1.15	0.045
E	0.80	0.031

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
TPSE73T10U5.0MB	SOT-723	8000PCS	7"

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By QR Code

Website



Wechat

To find your local partner within Semiware's global website: www.semiware.com

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