Discription

The PJSD24TS-AU protects sensitive semiconductor components from damage or upset due to electrostatic discharge (ESD) and other voltage induced transient events.

Excellent clamping capability, low leakage, low capacitance, and fast response time provide best in class protection on designs that are exposed to ESD.

It gives designer the flexibility to protect one unidirectional line in applications where arrays are not practical.



SOD-523

Features

- ★ Small Body Outline Dimensions
- ★ Low Body Height
- ★ Stand−off Voltage: 24V
- ★ Peak Power up to 330 Watts @ 8 x 20 us Pulse
- ★ Low Leakage
- ★ Response Time is Typically < 1 ns
- ★ ESD Rating of Class 3 per Human Body Model
- ★ IEC61000−4−2 Level 4 ESD Protection
- ★ IEC61000−4−4 Level 4 EFT Protection
- ★ We declare that the material of product compliance with RoHS requirements.



Circuit Diagram

Orderingin formation

Product ID	Pack	Qty(PCS)
PJSD24TS-AU	SOD-523	3000

Absolute Ratings(Tamb = 25°C)

Symbol	Parameter	Value	Units
P_{PP}	Peak Pulse Power (t_p = 8/20μs)	330	W
T_L	Maximum lead temperature for soldering during 10s	260	°C
T_{stg}	Storage Temperature Range	-55 to +150	°C
T_{op}	Operating Temperature Range	-40 to +125	°C
T_j	Maximum junction temperature	150	°C
	IEC61000-4-2 (ESD) air discharge contact discharge	±15 ±8	KV

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Device	V_{RWM} (V)	I_R(uA) @ V_{RWM}	V_{BR} (V)@ I_T (Note 1)	I_T	V_C (V) @ Max I_{PP}*	I_{PP} (A)*	P_{PK} (W)*	C (pF)
	Max	Max	Min	mA	Max	Max	Max	Typ
PJSD24TS-AU	24	1.0	26	1.0	55	6	330	25

*Surge current waveform per Figure 1.

1. V_{BR} is measured with a pluse test current I_T at an ambient temperature of 25℃.

Typical Characteristics

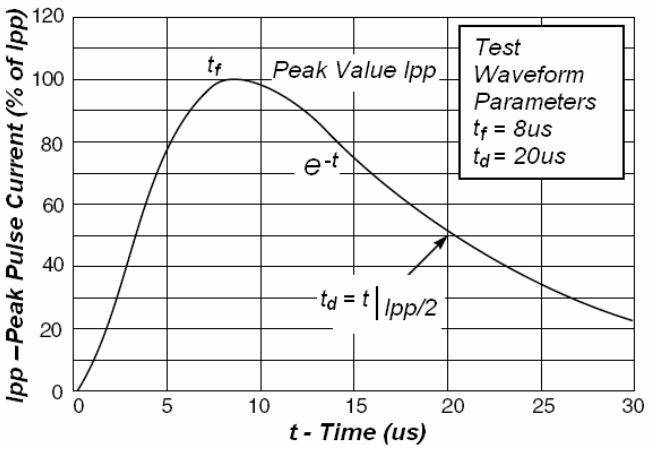


Fig1. Pulse Waveform

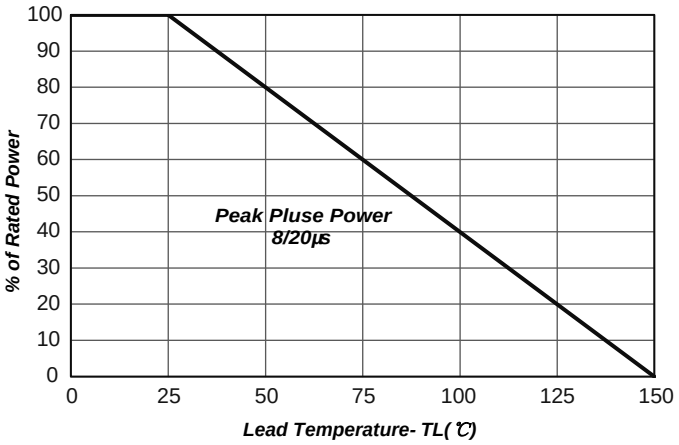
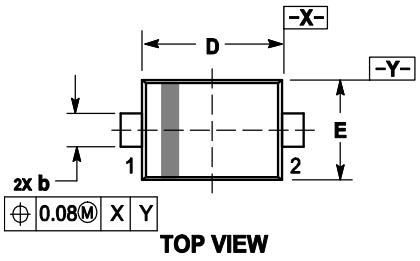
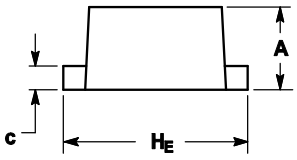


Fig2.Power Derating

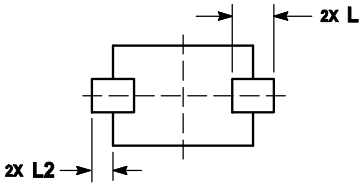
Outline And Dimensions



TOP VIEW



SIDE VIEW



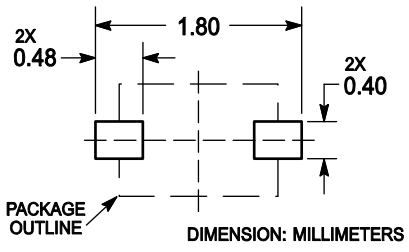
BOTTOM VIEW

Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.

	MILLIMETERS			INCHES		
DIM	MIN	NOM	MAX	MIN	NOM	MAX
A	0.50	0.60	0.70	0.020	0.024	0.028
b	0.25	0.30	0.35	0.010	0.012	0.014
c	0.07	0.14	0.20	0.003	0.006	0.008
D	1.10	1.20	1.30	0.043	0.047	0.051
E	0.70	0.80	0.90	0.028	0.031	0.035
H_E	1.50	1.60	1.70	0.059	0.063	0.067
L	0.30 REF			0.012 REF		
L_2	0.15	0.20	0.25	0.006	0.008	0.010

Soledering Footprint



DIMENSION: MILLIMETERS

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S4D15120H CH440G E4D10120A ISL28233FUZ-T7 2N7002-HXY C6D06065Q-TR TLV74318PDBVR-HXY PTVSHC3D5VU SG3525-HXY SS5150 MUR1040FCT TPS7A0533PDBZR-HXY 1SMB5930BT3G 1SMB5934B C3M0040120D DMPH6250SQ-13 HBAS40-05LT1G ISL28133FHZ-T7 MJD127G SGM3798YG/TR IRLML2244TRPBF-HXY Si2323DS-T1-E3-HXY TPD1E0B04DPYR DSC06065 AOD403-HXY BD237STU C4D08120E-TR IDL10G65C5XUMA2 MSC040SMA120B4 S3D08065E