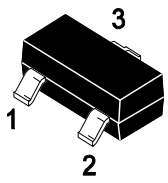
NUP2105LT1G
ESD PROTECTION DIODE

Discription

The NUP2105LT1G 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.

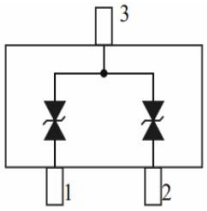
It gives designer the flexibility to protect one bi-directional line in applications where arrays are not practical.



SOT-23

Features

★ Low Leakage
★ IEC61000−4−2 Level 4 ESD Protection
★ We declare that the material of product compliant with RoHS requirements and Halogen Free.
★ S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.



Circuit Diagram

Ordering information

Product ID	Pack	Qty(PCS)
NUP2105LT1G	SOT-23	3000

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
IEC 61000-4-2 (ESD) Air discharge Contact discharge		±30 ±30	kV kV
Junction and Storage Temperature Range	TJ,TSTG	-55 to 150	℃

Stresses exceeding Maximum Ratings may damage the device. Maximum Rating are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

ELECTRICAL CHARACTERISTICS

Device	V_{RWM} (V)	I_R (μA) @ V_{RWM}	V_{BR} (V) @ I_T (Note 1)		I_T	V_C (V) @MAX I_{PP} (Note 2)	I_{PP}(A) (Note 2)	P_{PK}(W) (Note 2)	C (pF)
	Max	Max	Min	Max	mA	Max	Max	Max	Typ
NUP2105LT1G	24	0.5	26	33	1	40	4	160	10

Other voltage available upon request.

1. V_{BR} is measured with a pulse test current ITat an ambient temperature of 25℃
2. Surge current waveform per Figure 1.

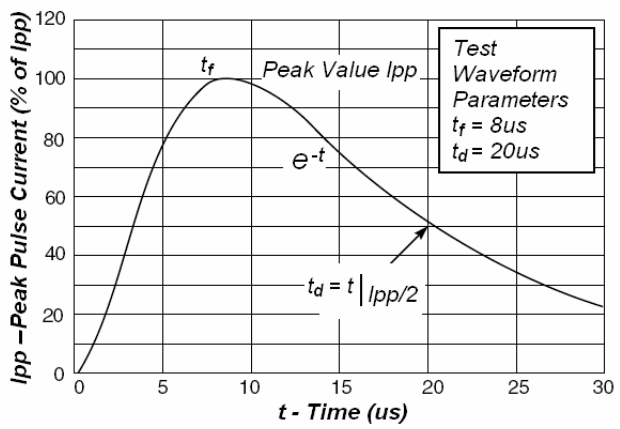


Fig1. Pulse Waveform

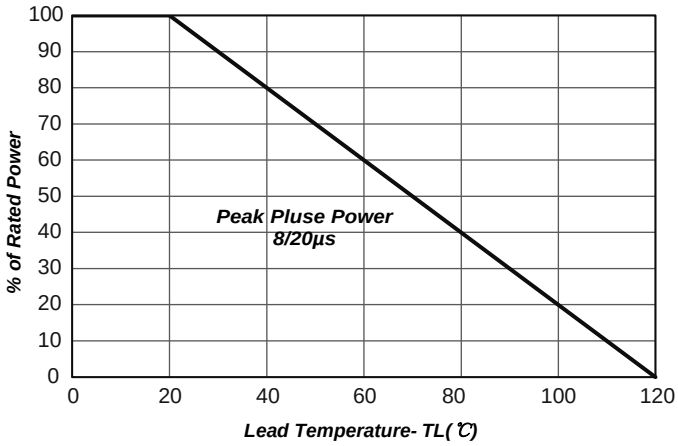
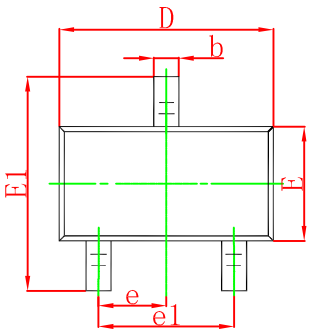
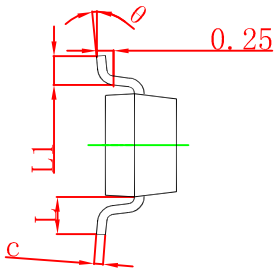
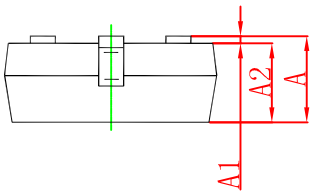


Fig2.Power Derating Curve

SOT-23 Package Outline Dimensions

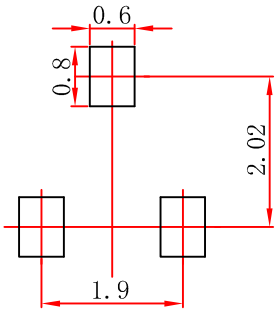






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

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