

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

**NUP3105LT1G**

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**Product specification**

## FEATURES

- IEC61000-4-2 (ESD)  $\pm 30\text{kV}$  (Contact)
- $\pm 30\text{kV}$  (Air)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- 350 Watts Peak Pulse Power per (tp=8/20 $\mu\text{s}$ )
- Working voltages: 36V
- Low leakage current

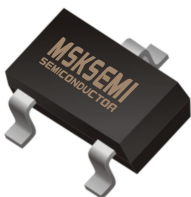
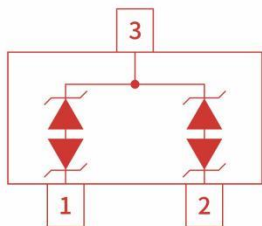

## MACHANICAL DATA

- SOT-23 package
- Flammability Rating: UL 94V-0
- Packaging: Tape and Reel
- High temperature soldering guaranteed:
- 260C/10s
- Reel size: 7 inch
- MSL 1

## APPLICATIONS

- Cell Phone Handsets and Accessories
- Microprocessor based equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Networking and Telecom
- Serial and Parallel Ports.
- Peripherals

## Reference News

PACKAGE OUTLINE	PIN CONFIGURATION	Marking
		
SOT-23		

**ABSOLUTE MAXIMUM RATING**

Symbol	Parameter	Value	Units
VESD	ESD per IEC 61000-4-2 (Contact)	±30	kV
	ESD per IEC 61000-4-2 (Air)	±30	
PPP	Peak Pulse Power (8/20μs)	350	W
TOPT	Operating Temperature	-55/+150	°C
TSTG	Storage Temperature	-55/+150	°C
TL	Lead Soldering Temperature	260 (10 sec.)	°C

**ELECTRICAL CHARACTERISTICS (Tamb=25 °C)**

P/N	VRWM (V) (max.)	VB (V) (min.)	IT (mA)	VC@1A (V) (max.)	VC (V) (max.) (@A)		IR (μA) (max.)	CJ (pF) (max.)
NUP3105LT1G	36.0	40.0	1	60.0	75.0	4.5	1	35

## ELECTRICAL CHARACTERISTICS CURVE

Fig 1 8/20 $\mu$ s Waveform per IEC61000-4-5

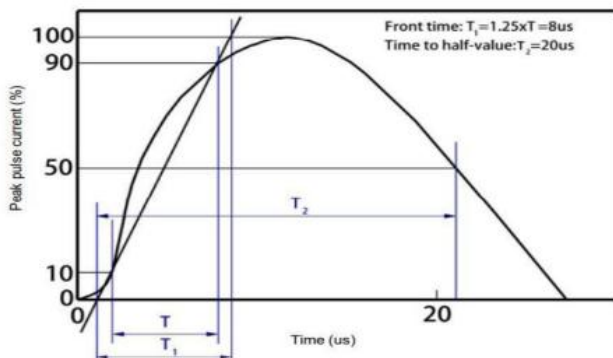


Fig 2 Contact Discharge Current Waveform per IEC 61000-4-2)

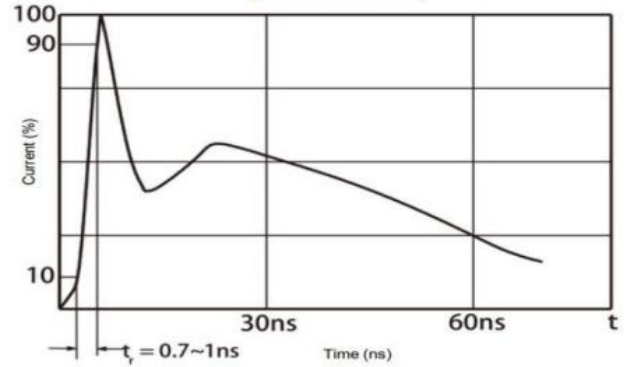


Fig 3 Voltage vs Capacitance

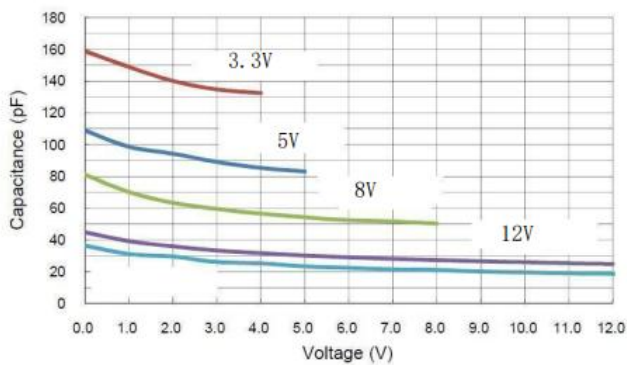


Fig 4 Voltage vs Capacitance

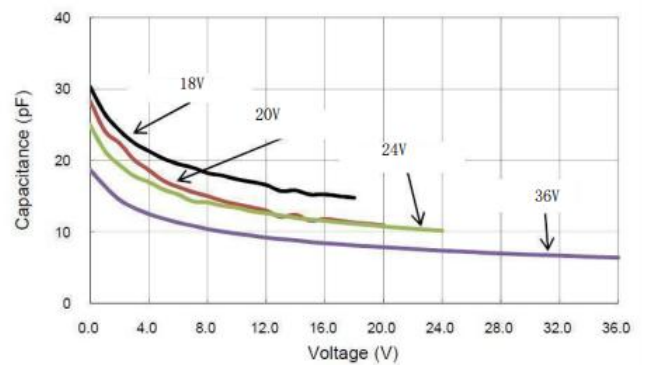


Fig 5 Clamping Voltage vs Peak Pulse Current

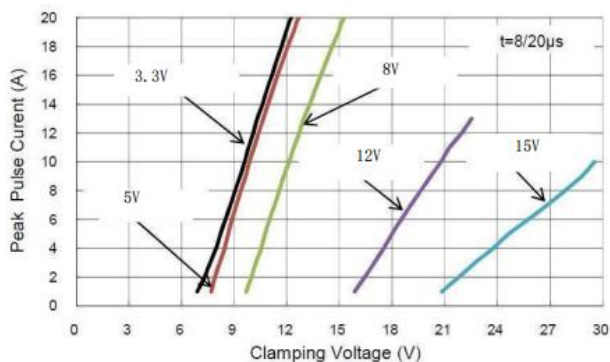
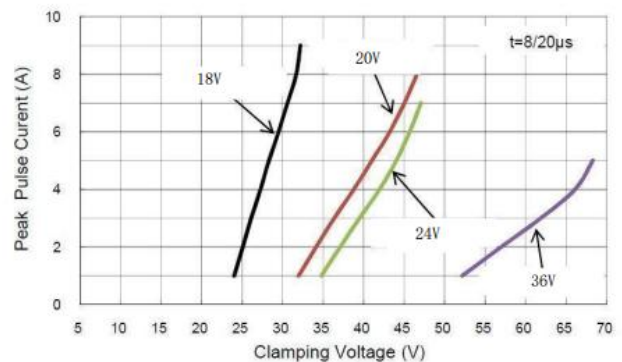
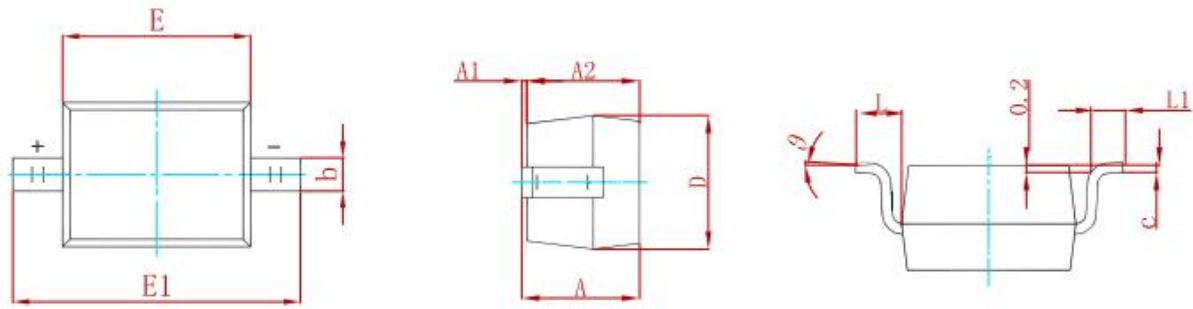


Fig 6 Clamping Voltage vs Peak Pulse Current

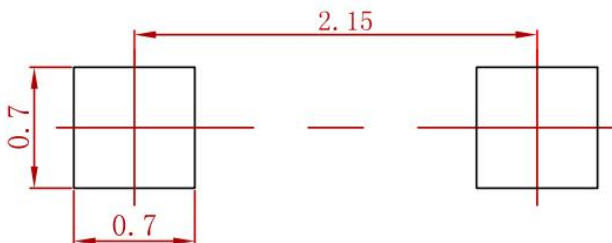


## PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min.	Max
A		1.000		0.039
A1	0.000	0.100	0.000	0.004
A2	0.800	0.900	0.031	0.035
b	0.250	0.350	0.010	0.014
C	0.080	0.150	0.003	0.006
D	1.200	1.400	0.047	0.055
E	1.600	1.800	0.063	0.071
E1	2.550	2.750	0.100	0.108
L	0.475 REF		0.019 REF	
L1	0.250	0.400	0.010	0.016
θ	0°	8°	0°	8°

## Suggested Pad Layout



### Note:

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.

## REEL SPECIFICATION

P/N	PKG	QTY
NUP3105LT1G	SOT-23	3000

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