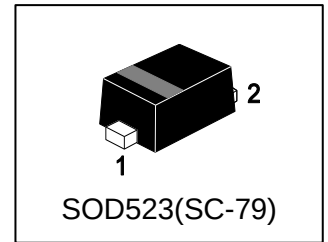


LESD5Z24T5G

ESD PROTECTION DIODE

1. FEATURES

- Low Leakage current
- Low clamping voltage.
- Response Time is Typically < 1 ns
- Complies with IEC 61000-4-2 standards: Air discharge: $\pm 30\text{kV}$
Contact discharge: $\pm 30\text{kV}$
- We declare that the material of product compliance with
RoHS requirements and Halogen Free.



2. APPLICATIONS

- Cellular phones audio
- Digital cameras
- Portable applications
- Mobile telephone

3. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LESD5Z24T5G	524	8000/Tape&Reel

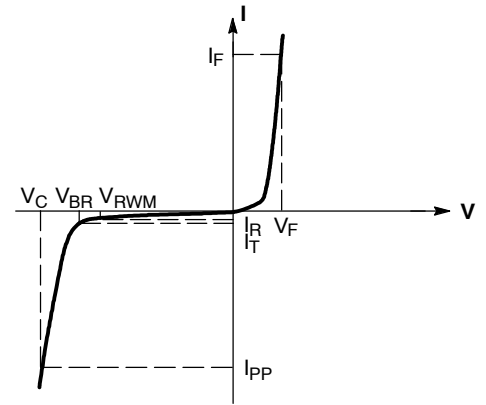
4. MAXIMUM RATINGS($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
IEC 61000-4-2 (ESD) Contact		± 30	kV
Air		± 30	
peak pulse power@8/20 μs (Note 1)	PPP	200	W
peak pulse current @8/20 μs (Note 1)	IPP	7	A
Storage Temperature Range	Tstg	$-55 \sim +150$	$^\circ\text{C}$
Junction Temperature Range	TJ	$-55 \sim +150$	$^\circ\text{C}$

Note 1. Surge current waveform per Figure 1 according to IEC 61000-4-5.

5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Symbol	Parameter
IPP	Maximum Reverse Peak Pulse Current
VC	Clamping Voltage @ IPP
VRWM	Working Peak Reverse Voltage
IR	Maximum Reverse Leakage Current @ VRWM
VBR	Breakdown Voltage @ IT
IT	Test Current
IF	Forward Current
VF	Forward Voltage @ IF
Ppk	Peak Power Dissipation
C	Capacitance @ VR = 0 and f = 1.0 MHz



Uni-Directional TVS

6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Reverse stand-off voltage	VRWM				24	V
Breakdown Voltage	VBR	IT = 1mA	25.9		28	V
Reverse leakage current	IR	VR = 24V			0.05	μA
Forward Voltage	VF	IF = 10mA			1.2	V
Clamping Voltage(Note 1)	VC1	IPP = 6A, tp=8/20μs			38	V
Clamping Voltage,TLP	VC2	IPP= 4 A, tp=100ns		29		V
		IPP= 8 A, tp=100ns		31		
		IPP= 16 A, tp=100ns		33		
Dynamic resistance	RDYN			0.4		Ω
Junction Capacitance	Cj	VR = 0V, f = 1MHz			50	pF

Note 1.Surge current waveform per Figure 1 according to IEC 61000-4-5.

7. ELECTRICAL CHARACTERISTICS CURVES

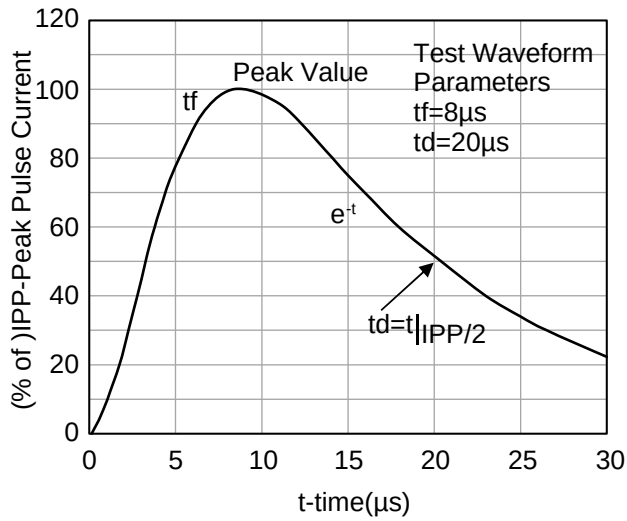


Figure 1. Pulse Waveform according to IEC 61000-4-5

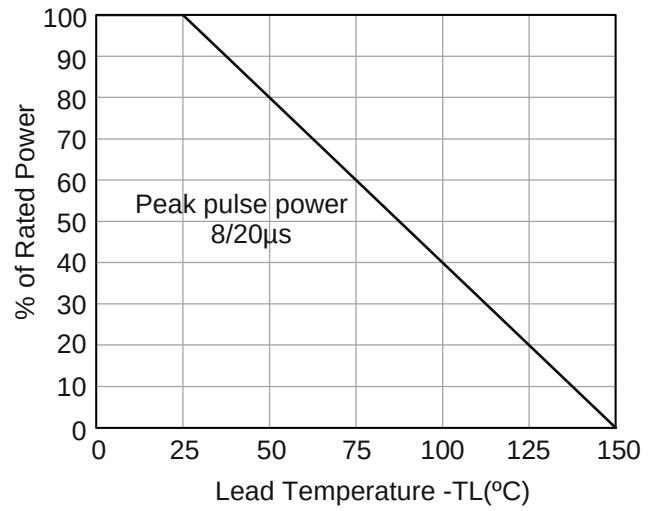


Figure 2. Power Derating Curve

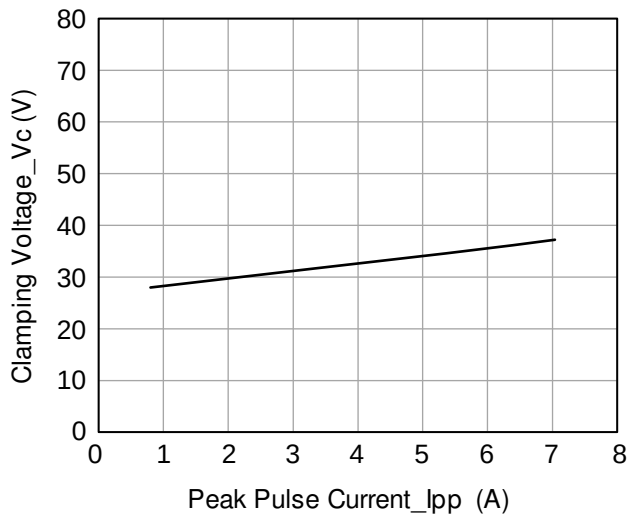


Figure 3. Clamping Voltage vs. Peak Pulse Current according to IEC 61000-4-5.

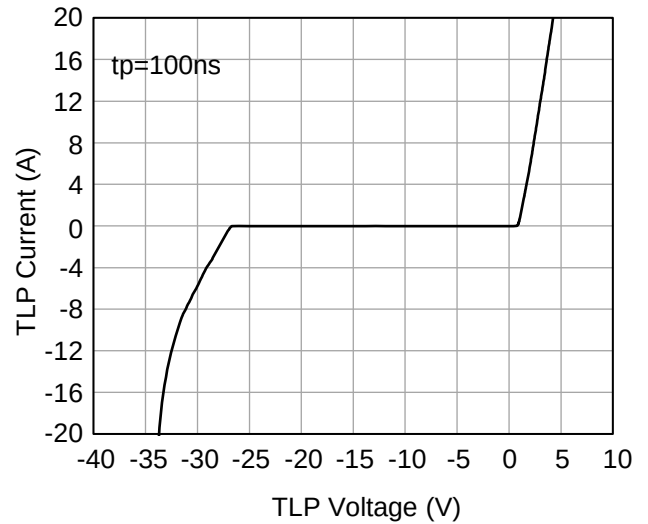


Figure 4. TLP Measurement

DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.
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