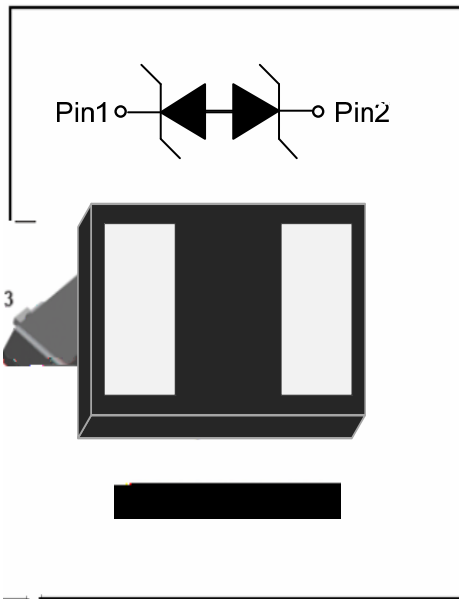


1-Line, Bi-directional, Transient Voltage Suppressor



Features

- Single line, bi-directional protection
- Low leakage current
- High peak pulse current capability

$R = F \cdot I_{PP} \cdot t$
 • Low capacitance
 • High surge current capability
 • High peak pulse current capability

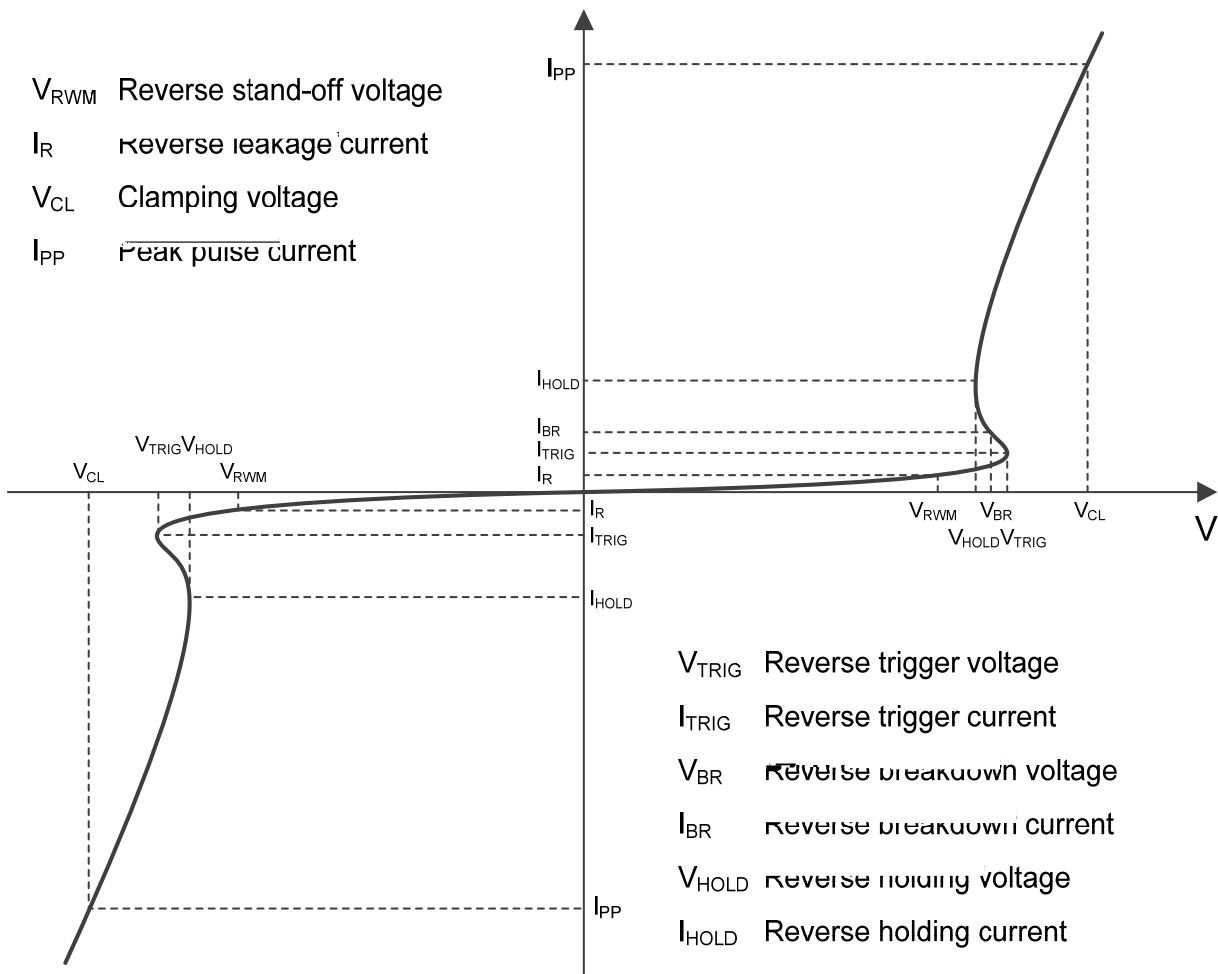
Mechanical Data

Package: SOD-8
Terminals: Gull wing
Polarity: Pin 1 marked with a triangle
Marking: 4R



Definitions of electrical characteristics

- V_{RWM} Reverse stand-off voltage
- I_R Reverse leakage current
- V_{CL} Clamping voltage
- I_{PP} Peak pulse current



- V_{TRIG} Reverse trigger voltage
- I_{TRIG} Reverse trigger current
- V_{BR} Reverse breakdown voltage
- I_{BR} Reverse breakdown current
- V_{HOLD} Reverse holding voltage
- I_{HOLD} Reverse holding current



ESD4V5LBA2

Maximum Ratings

PARAMETER	SYMBOL	Rating	UNIT
[REDACTED]	[REDACTED]	J _{EC}	Y
		J _E	CE
		±H _{EC}	SX
		±H _E	SX
		FG _I	IO
		E _{IE-1I}	IO
		E _{II-FIE}	IO
		[REDACTED]	[REDACTED]

PARAMETER	SYMBOL	Conditions	Min	Typ	Max
U [^] φ [!] • [^] {æøi{ ~ { , [!i} * ç [cæ* [^]	X _{UYT}	X			±1EÍ
U [^] φ [!] • [^] æ\æ* [^] & ~ !i [^] }c	Q _U	~CE			F
U [^] φ [!] • [^] à!æ\â [,) ç [cæ* [^]	X _{OU}	X	1EÍ		
Ô æ {]i} * ç [cæ* [^] 1)	X _{Os}	X		î	
Ö [^] }æ { â& ! [^] •i•cæ } & [^] 1)	Ü _{OYB}			€E€I	
Ô æ {]i} * ç [cæ* [^] 2)	X _{Os}	X		ï	

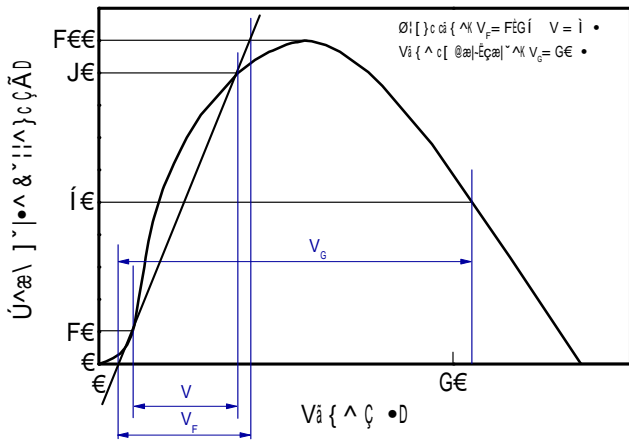
Ô|æ {]i} * ç [|cæ*[^] 3) X_{Os}



ESD4V5LBA2

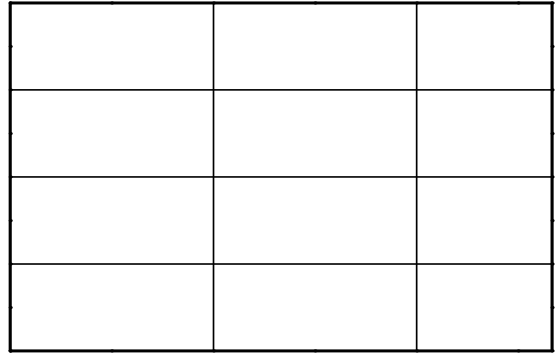
Characteristics

8/20µs waveform per IEC61000 4 5



Clamping voltage vs. Peak pulse current

Contact discharge current waveform per IEC61000 4 2



Capacitance vs. Reverse voltage

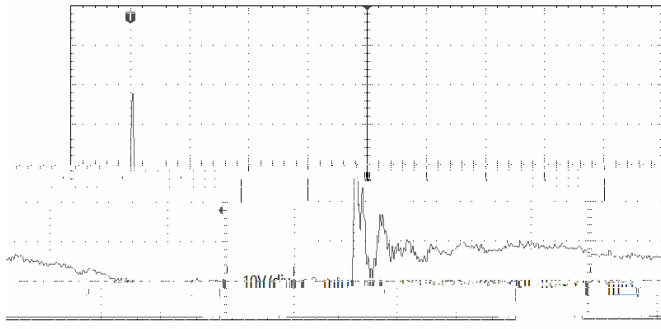
Non repetitive peak pulse power vs. Pulse time

Power derating vs. Ambient temperature

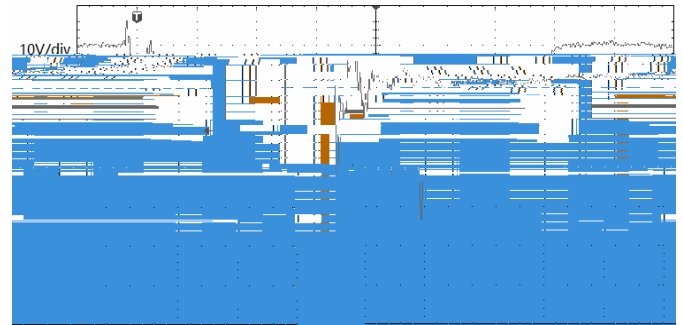


ESD4V5LBA2

ESD damping
(+8kV contact discharge per IEC61000 4 2)



ESD damping
(-8kV contact discharge per IEC61000 4 2)

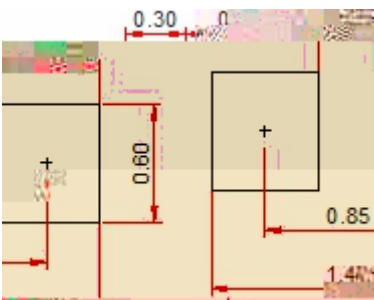


Outline Dimensions



Symbol	min (mm)	Max (mm)
A	0.95	1.05
B	0.55	0.65
C	0.4	0.5
C1		0.05
D	0.01	0.08
E		0.65
F	0.2	0.3
G	0.45	0.55

Recommend land pattern



1. The land pattern is defined by the following dimensions:
 - Width: 0.30 mm
 - Height: 0.60 mm
 - Distance from the edge to the center: 0.85 mm
 - Total width: 1.40 mm



ESD4V5LBA2

Disclaimer