



APPLICATIONS

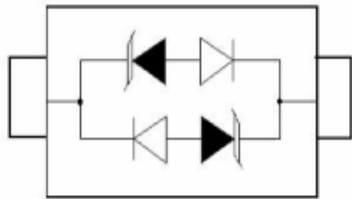
- Ethernet - 10/100/1000 Base T
- Cellular Phones
- Handheld - Wireless Systems
- Personal Digital Assistant (PDA)
- USB Interface

IEC COMPATIBILITY (EN61000-4)

- 61000-4-2 (ESD): Air - 15kV, Contact - 8kV
- 61000-4-4 (EFT): 40A - 5/50ns
- 61000-4-5 (Surge): 24A, 8/20µs - Level 2(Line-Gnd) & Level 3(Line-Line)

FEATURES

- 350 Watts Peak Pulse Power per Line (tp=8/20µs)
- Unidirectional & Bidirectional Configurations
- Replacement for MLV (0805)
- Protects One Power or I/O Port
- ESD Protection > 40 kilovolts
- Low Clamping Voltage
- Available in Multiple Voltage Types Ranging From 24V
- Ultra Low Capacitance: 0.6pF Typical
- RoHS Compliant



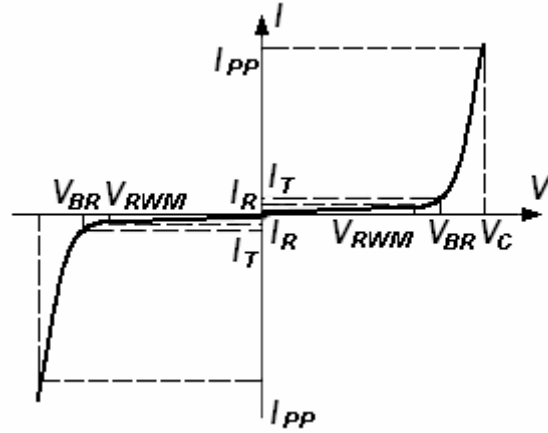
MECHANICAL CHARACTERISTICS

- Molded JEDEC SOD-323 Package
- Weight 5 milligrams (Approximate)
- Available in Lead-Free Pure-Tin Plating(Annealed)
- Solder Reflow Temperature:
 - Pure-Tin - Sn, 100: 260-270°C
- Consult Factory for Leaded Device Availability
- Flammability Rating UL 94V-0
- 8mm Tape and Reel Per EIA Standard 481
- Device Marking: Marking Code & Polarity Band (*Unidirectional Only*)

Absolute Ratings (T_{amb}=25°C)

Symbol	Parameter	Value	Units	
P _{PP}	Peak Pulse Power (t _p = 8/20 µ s)	150	W	
T _L	Maximum lead temperature for soldering during 10s	260	°C	
T _{stg}	Storage Temperature Range	-55 to +155	°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
	IEC61000-4-4 (EFT)		40	A
	ESD Voltage	Per Human Body Model	16	KV

Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T



Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified. VF = 0.9V at IF = 10mA

Device	Device Marking	V_{RWM} (V)	I_R (uA) @ V_{RWM}	V_{BR} (V) @ I_T (Note 1)	I_T	V_C (V) @ $I_{PP}=1A^*$	V_C (V) @ Max I_{PP}^*	I_{PP} (A)*	P_{PK} (W)*	C (pF)
		Max	Max	Min	mA	Typ	Max	Max	Max	Typ
KNESD24V32D-C	HC	24	1.0	26.7	1.0	43	56	3.0	168	1.5

1. V_{BR} is measured with a pulse test current I_T at an ambient temperature of 25°C.

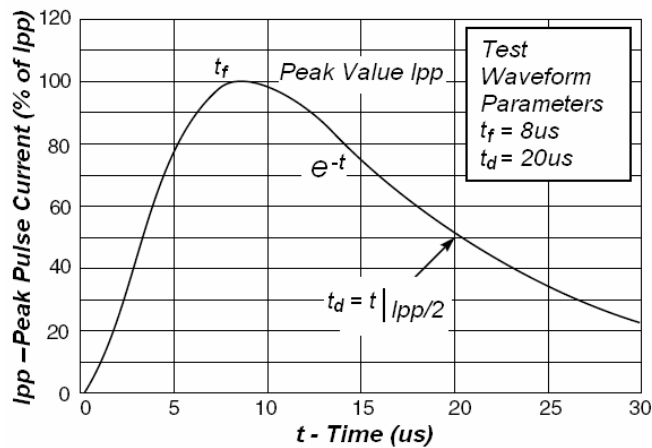
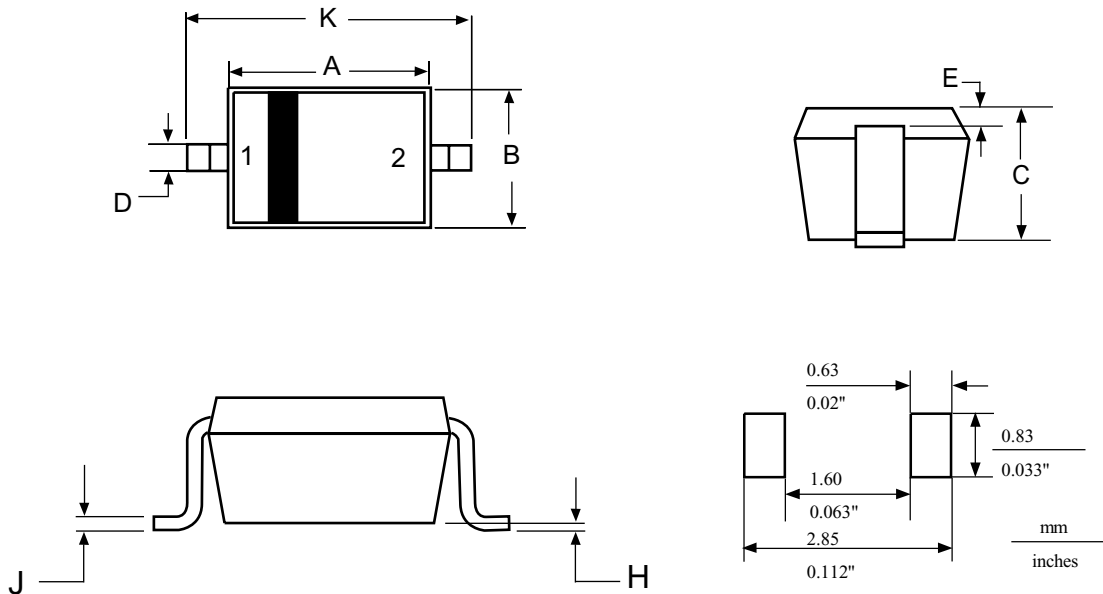


Fig1. Pulse Waveform

SOD-323



NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.60	1.80	0.063	0.071
B	1.15	1.35	0.045	0.053
C	0.80	1.00	0.031	0.039
D	0.25	0.40	0.010	0.016
E	0.15 REF		0.006 REF	
H	0.00	0.10	0.000	0.004
J	0.089	0.177	0.0035	0.0070
K	2.30	2.70	0.091	0.106

PIN: 1. CATHODE
2. ANODE