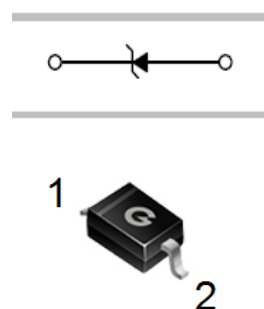


Features

- ESD / transient protection of high speed data lines
 - IEC 61000-4-2 (ESD): ± 30 kV (air), ± 30 kV (contact)
- Working Voltage: 21V
- Low Clamping Voltage
- Low Leakage Current
- Halogen Free

HF



SD21

SOD-323

Typical Applications

- Single Line TVS Diode

Mechanical Data

- Case: SOD-323
- Molding Compound, UL Flammability Classification Rating 94V-0
- Terminals: Tin Plated Leads, Solderable Per MIL-STD-202, Method 208

Ordering Information

Part Number	Package	Shipping	Marking Code
SD21	SOD-323	3000/Tape Reel	D21

Maximum Ratings (@ $T_A=25^{\circ}\text{C}$ unless otherwise specified)

Characteristic	Symbol	Value	Units
IEC 61000-4-2; ESD (Air)	$V_{\text{ESD-A}}$	± 30	kV
IEC 61000-4-2; ESD (Contact)	$V_{\text{ESD-C}}$	± 30	kV
Peak pulse power ($t_p = 8/20\mu\text{s}$)	P_{PK}	400	W
Reverse Stand-off Voltage	V_{RWM}	21	V

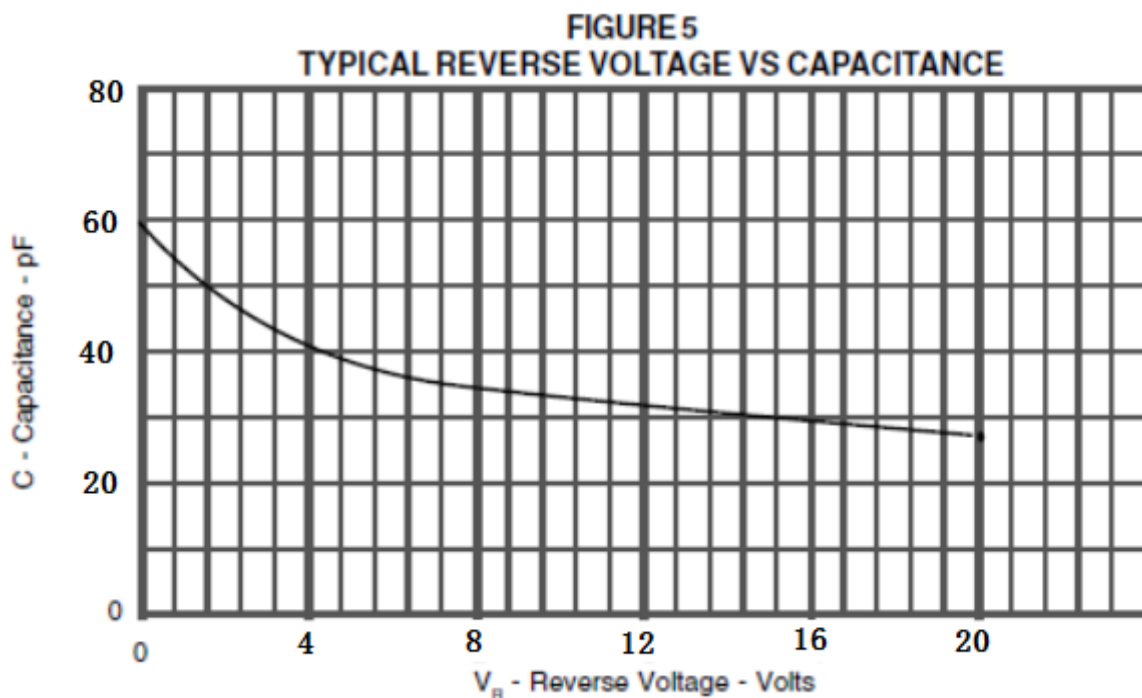
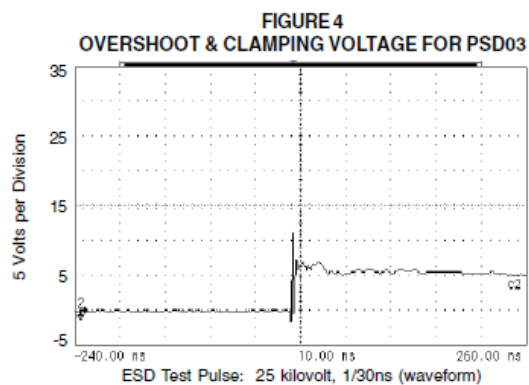
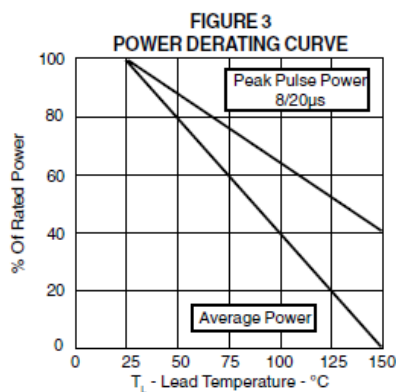
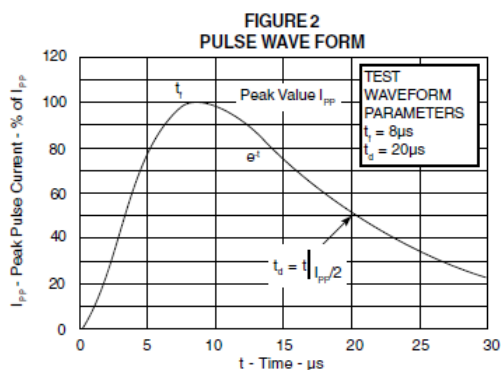
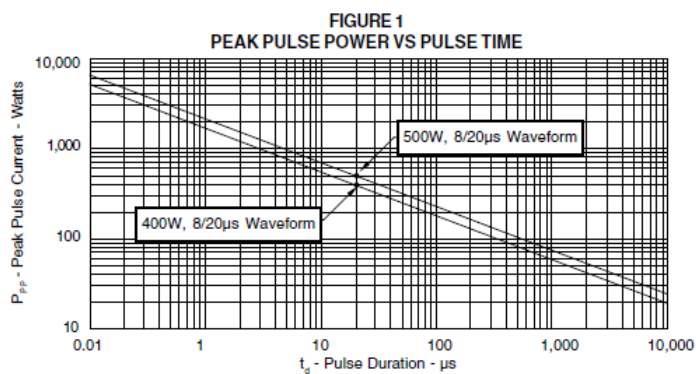
Thermal Characteristics

Parameter	Symbol	Value	Units
Junction temperature	T_J	150	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics (@ $T_A=25^{\circ}\text{C}$ unless otherwise specified)

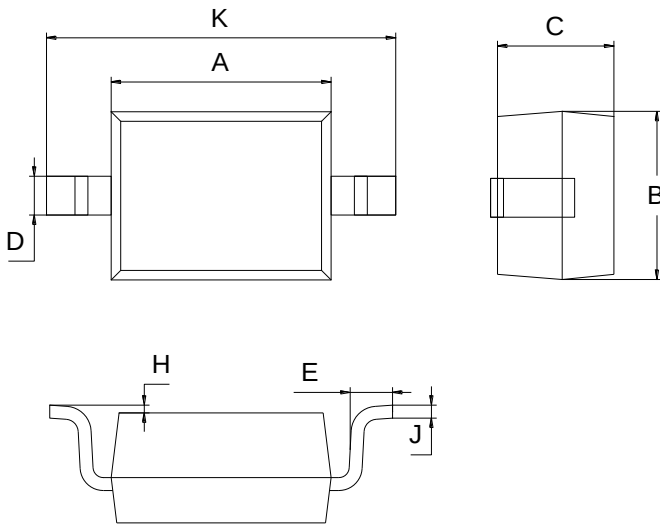
Parameter	Symbol	Test conditions	Min.	Typ.	Max.	Units
Reverse breakdown voltage	V_{BR}	$I_{\text{R}}=1\text{mA}$	21.5	22.5	23.5	V
Reverse leakage current	I_{R}	$V_{\text{RWM}}=21\text{V}$	-	-	1	μA
Clamping voltage	V_{C}	$I_{\text{PP}}=1\text{A}$, $t_p=8/20\mu\text{s}$	-	27	30	V
		$I_{\text{PP}}=9\text{A}$, $t_p=8/20\mu\text{s}$	-	38	44	V
Junction capacitance	C_J	$V_{\text{R}}=0\text{V}$, $f=1\text{MHz}$	-	50	90	pF

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)



Package Outline Dimensions (unit:mm)

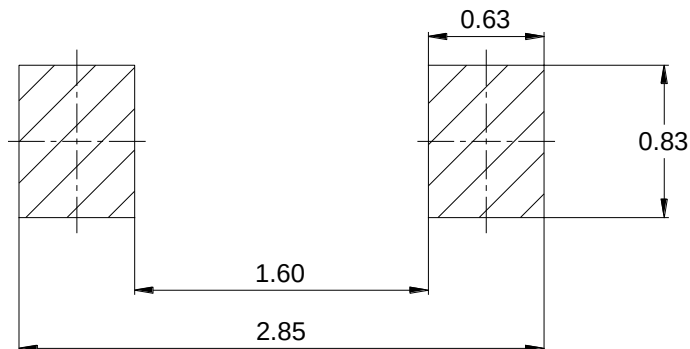
SOD-323



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75

Mounting Pad Layout (unit:mm)

SOD-323



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