

**SD15C**  
**SD24C**

**Features**

- Halogen free available upon request by adding suffix "-HF"
- Protects one I/O or power line
- Low clamping voltage
- Low leakage current
- Solid-state silicon avalanche technology
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

**Maximum Ratings**

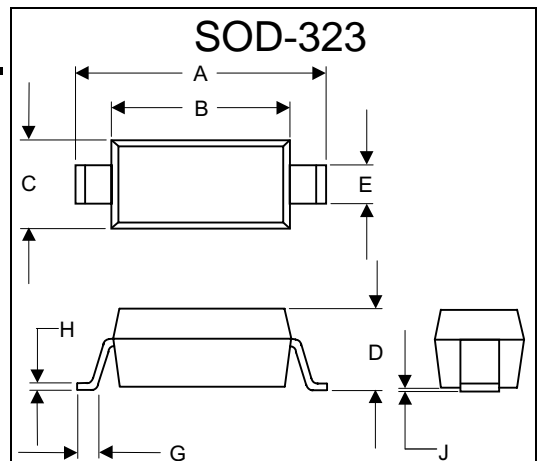
- Operating Junction : -55°C to +125°C
- Storage Temperature: -55°C to +150°C

Parameter	Symbol	Limits	unit
ESD Voltage(HBM waveform per IEC 6100-4-2)		30	KV
Peak Power Dissipation (8/20us)	P <sub>pk</sub>	350	W



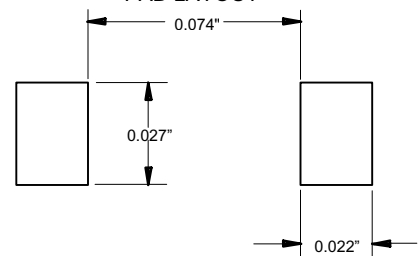
Marking:  
SD15C :7/7  
SD24C :8/8 or 24

**15~24Volts**  
**ESD Protection**  
**Devices**



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

**SUGGESTED SOLDER**  
**PAD LAYOUT**





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### SD15C TVS for 15V Lines

ELECTRICAL CHARACTERISTICS( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse stand-off voltage	$V_{RWM}$			15	V	
Reverse breakdown voltage	$V_{(BR)R}$	16.7			V	$I_R=1\text{mA}$
Clamping voltage	$V_C$			30 40	V	$I_{PP}=5\text{A}, t_p=8/20\mu\text{s}$ $I_{PP}=12\text{A}, t_p=8/20\mu\text{s}$
Reverse leakage current	$I_R$			1	$\mu\text{A}$	$V_{RWM}=15\text{V}$
Junction Capacitance	$C_J$			75	pF	$V_R=0\text{V}, f=1\text{MHz}$

### SD24C TVS for 24V Lines

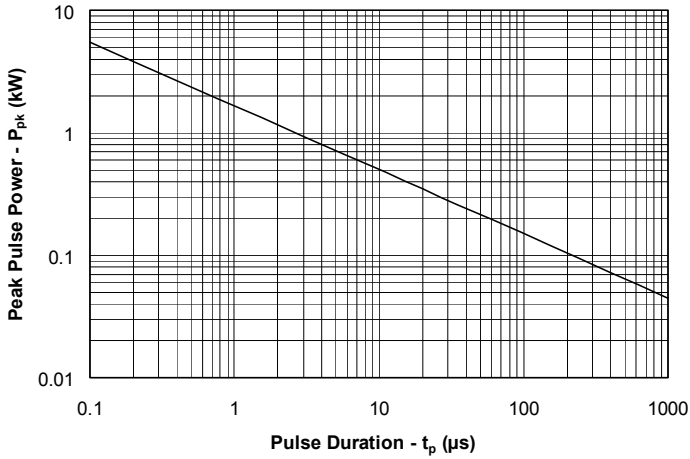
ELECTRICAL CHARACTERISTICS( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse stand-off voltage	$V_{RWM}$			24	V	
Reverse breakdown voltage	$V_{(BR)R}$	26.7			V	$I_R=1\text{mA}$
Clamping voltage	$V_C$			40 62	V	$I_{PP}=1\text{A}, t_p=8/20\mu\text{s}$ $I_{PP}=8\text{A}, t_p=8/20\mu\text{s}$
Reverse leakage current	$I_R$			1	$\mu\text{A}$	$V_{RWM}=24\text{V}$
Junction Capacitance	$C_J$			50	pF	$V_R=0\text{V}, f=1\text{MHz}$

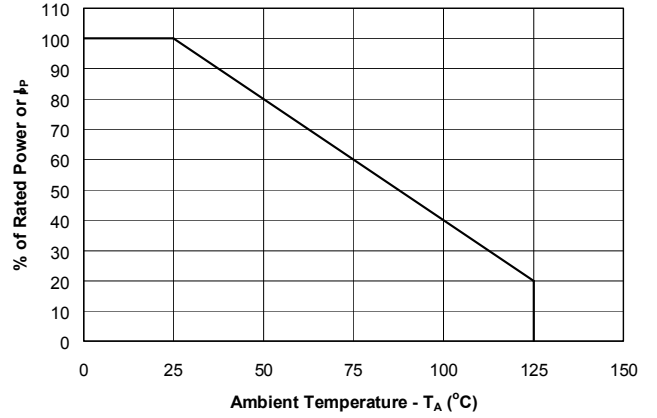


TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

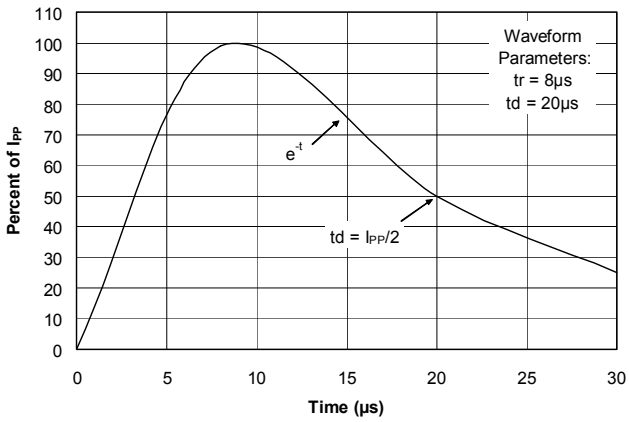
**Non-Repetitive Peak Pulse Power vs. Pulse Time**



**Power Derating Curve**



**Pulse Waveform**





**Ordering Information :**

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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