



SE05Q6BDD5

ESD PROTECTION DIODE

FEATURES

- 107W Peak Pulse Power per Line (tp=8/20μs)
- IEC61000-4-2(ESD) ±30kV(Air), ±30kV(Contact)
- Protect One Power or I/O Port
- Low Clamping Voltage
- Low Leakage current
- Bi-directional Configurations
- Suffix " H " indicated Halogen-free part, ex.SE05Q6BDD5H

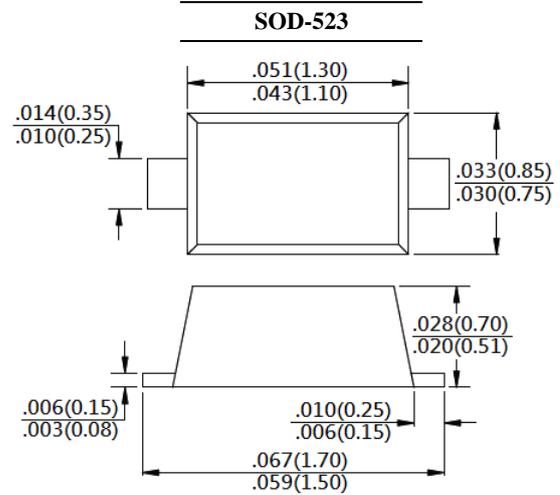
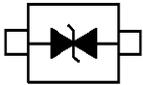
APPLICATIONS

- Cellular handsets and accessories
- Portable instrumentation
- Peripherals
- Serial and Parallel Ports
- Notebooks, Desktops, Servers

MECHANICAL DATA

Case : SOD-523

PIN CONFIGURATION



Dimensions in inches and (millimeters)

Maximum Ratings (Rating at 25°C ambient temperature unless otherwise specified)

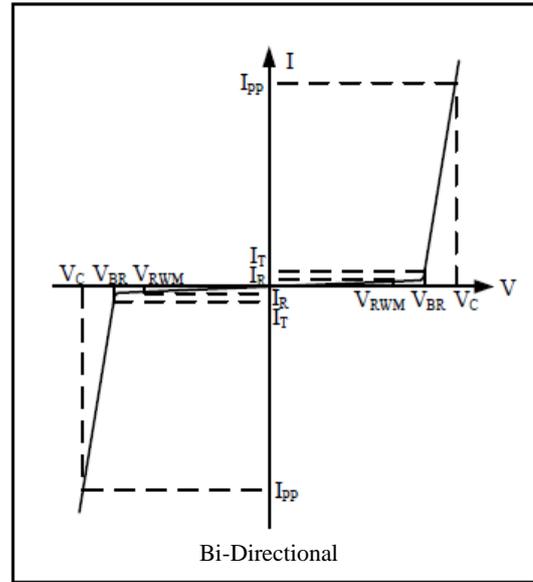
Parameter	Symbol	Value	Units
Peak Pulse Power (tp = 8/20μs)	P _{pp}	107	W
ESD per IEC 61000-4-2 (Air)	V _{ESD}	±30	kV
ESD per IEC 61000-4-2 (Contact)		±30	
Operating Junction Temperature Range	T _J	-55 to +125	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C



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



Electrical Characteristics Per line @ 25°C Unless Otherwise Specified

Part Numbers	V_{RWM}	I_R	V_{BR}	I_T	V_C @ $I_{PP}=8.7A$	C_j @ $V_R=0V, 1MHz$	
	(V)	(μA)	Min.(V)	(mA)	(V)	Typ.(pF)	Max.(pF)
SE05Q6BDD5	5.0	1.0	6.2	1.0	12.3	65.0	-



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RATINGS AND CHARACTERISTIC CURVES

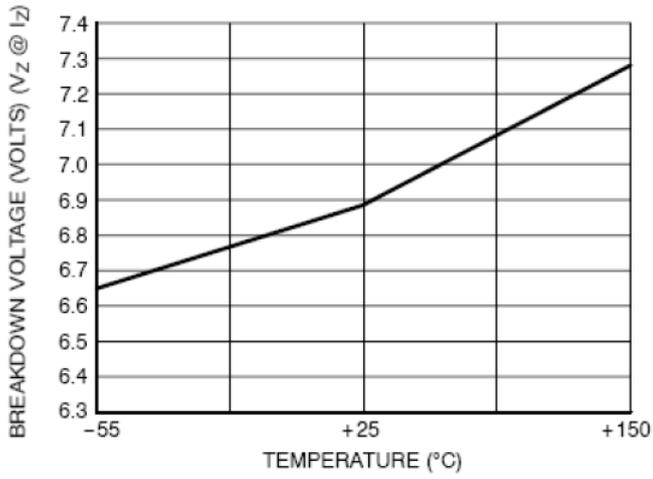


Figure 1. Typical Breakdown Voltage versus Temperature

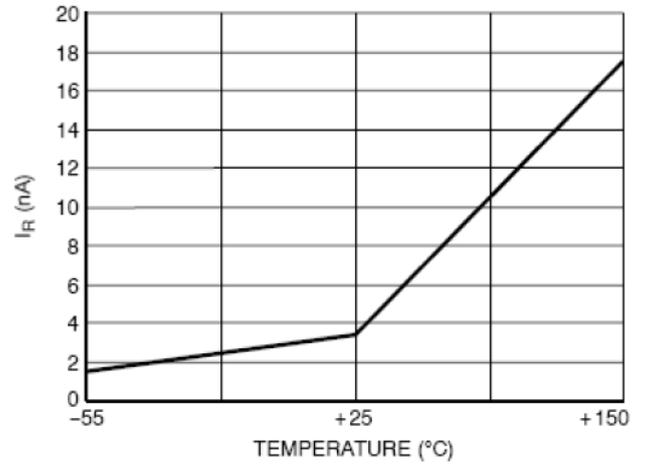


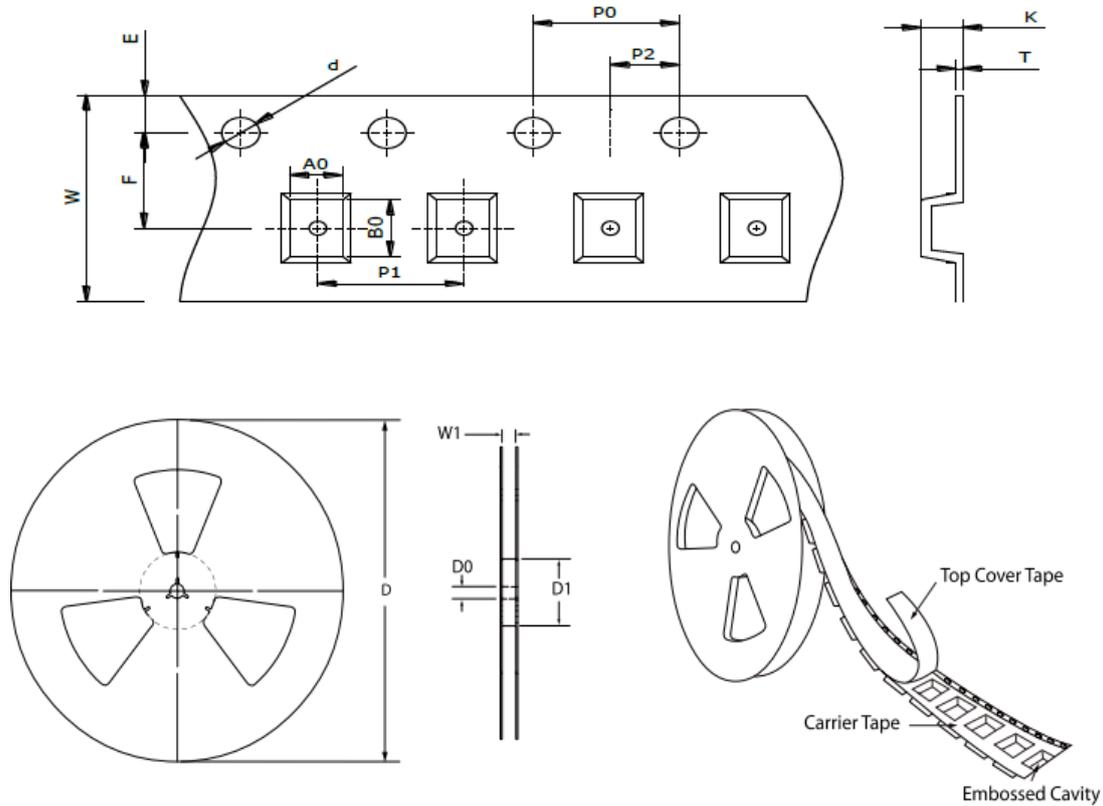
Figure 2. Typical Leakage Current versus Temperature



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TAPE & REEL SPECIFICATION



Item	Symbol	SOD-523
Carrier width	A ₀	0.80 ± 0.10
Carrier length	B ₀	1.95 ± 0.10
Carrier depth	K	0.50 ± 0.10
Sprocket hole	d	1.50 ± 0.10
Reel outside diameter	D	178.00 ± 2.00
Feed hole width	D ₀	13.00 ± 0.20
Reel inner diameter	D ₁	MIN. 54.00
Sprocket hole position	E	1.75 ± 0.10
Punch hole position	F	3.50 ± 0.10
Sprocket hole pitch	P ₀	4.00 ± 0.10
Punch hole pitch	P ₁	4.00 ± 0.10
Embossment center	P ₂	2.00 ± 0.10
Overall tape thickness	T	0.25 ± 0.05
Tape width	W	8.00 ± 0.20
Reel width	W ₁	MAX. 13.50

ORDER INFORMATION

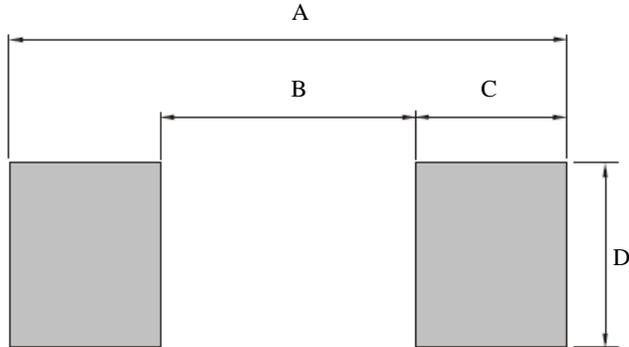
Package	Reel Size	Quantity
SOD-523	7"	4,000



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SUGGESTED SOLDER PAD LAYOUT



Unit : mm

PACKAGE	A	B	C	D
SOD-523	2.02	0.82	0.60	0.70