SMDB03-G thru SMDB24-G

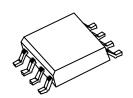
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TVS ARRAY SERIES

FEATURES

- ✓ Protects 3.3, 5, 12, 15, 24 V Components
- ✓ Unidirectional
- ✓ Provides Electrically Isolated Protection
- √ 500 W @ 8/20 µs
- ✓ Protects 4 Lines
- ✓ SO-8 Packaging
- ✓ Green Products in Compliance with the RoHS Directive

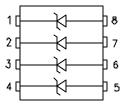


DESCRIPTION

The SMDBXX-G series of TVS array have been designed to provide unidirectional protection for sensitive electronics from damage due to voltage transients caused by electrostatic discharge (ESD), electrical fast transients (EFT), lightning and other voltage-induced transient events. The device can be used to protect combinations of four unidirectional lines.

SCHEMATIC & PIN CONFIGURATION

SO-8



APPLICATION

- ✓ RS-232 Data Lines
- ✓ Microprocessor Based Equipment
- ✓ Notebooks, Desktops, & Servers
- ✓ LAN/WAN Equipment
- ✓ Serial and Parallel Port
- ✓ Peripherals

MECHANICAL CHARACTERISTICS

- ✓ SO-8 Surface Mount Package
- ✓ Approximate Weight: 0.1 grams
- ✓ Marking: Device number, Date code, & Logo
- ✓ PIN #1 Indicator: DOT on top of package
- ✓ Packaging: Tubes or Tape & Reel per EIA Standard 481

Value

ABSOLUTE MAXIMUM RATINGS Symbol Parameter

- ,			
Р	Peak Pulse Power, 8/20 μs Waveshape	500	W
T_J	Operating Temperature	-55 to +125	°C
T_{STG}	Storage Temperature	-55 to +150	°C
T_L	Lead Soldering Temperature	260 (10 Sec.)	°C

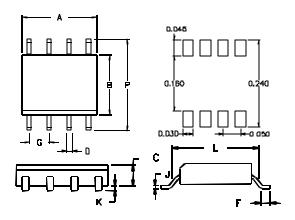
Unit

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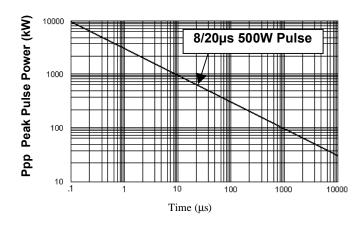
ELECTRICAL CHARACTERISTICS @ 25 °C									
Part Number	Stand-off	Breakdown	Clamping	Leakage	Capacitance	Temperature			
	Voltage	Voltage	Voltage	Current	(f = 1MHz)	Coefficient			
		V_{BR}	V _c	I_R	С	of V _{BR}			
	V_{wm}	@1mA	@ 1 A	@ V _{wm}	@ 0V	a(V _{BR})			
	(v)	(V)	(V)	(μA)	(pF)	mv/°C			
	Max	Min	Max	Max	Max	Max			
SMDB03-G	3.3	4	7	200	800	-3			
SMDB05-G	5.0	6	9.8	20	600	3			
SMDB12-G	12.0	13.3	19	1	185	10			
SMDB15-G	15.0	16.7	24	1	140	13			
SMDB24-G	24.0	26.7	43	1	90	30			

PACKAGE OUTLINES & DEMENSIONS



	INC	HES	MILLIMETERS		
DIM	MIN.	MAX	MIN.	MAX.	
A	0.189	0.196	4.8	5.0	
В	0.150	0.157	3.8	4.0	
C	0.053	0.069	1.35	1.75	
D	0.011	0.021	0.28	0.53	
F	0.016	0.050	0.41	1.27	
G	0.050 BSC		1.27 BSC		
J	0.006	0.010	0.15	0.25	
K	0.004	0.008	0.10	0.20	
L	0.189	0.206	4.80	5.23	
P	0.228	0.244	5.79	6.19	

TYPICAL CHARACTERISTICS



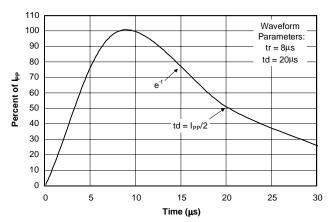


Figure 1. Peak Pulse Power Vs Pulse Time (ms)

Figure 2. Pulse Wave Form



SMDB03-G thru SMDB24-G

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