

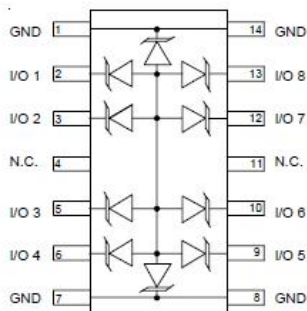
S14C03-8 THRU S14C36-8 TVS ARRAY SERIES



Description

The S14CXX-8 series of TVS array have been designed to provide bidirectional 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 8 bidirectional lines up to 36 volts.

Schematic & Pin Configuration



Features

- Protects 3.3, 5, 12, 15, 24, 36 V Components
- Bidirectional
- Provides Electrically Isolated Protection
- 300 W @ 8/20 us
- Protects 8 Lines
- SO-14 Packaging
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Characteristics

- SO-14 Surface Mount Package
- Approximate Weight: 0.13 grams
- PIN #1 Indicator: DOT on top of package
- Packaging: Tubes or Tape & Reel per EIA
- Standard 481

Application

- RS-232, RS-422, RS-423 & RS 485
- LAN/WAN Equipment
- Serial and Parallel Ports
- Board Level Interface Connection
- Portable Instrumentation
- Computer & Peripherals

Absolute Maximum Ratings:

Parameter	Symbol	Value	Units
Peak Pulse Power, 8/20 μ s Wave shape	P	300	W
Operating Temperature	T _J	-55 to +125	°C
Storage Temperature	T _{stg}	-55 to +150	°C
Lead Soldering Temperature	T _L	260 (10 Sec.)	°C

Electrical Characteristics@25°C

Part Number	Stand-off Voltage V_{wm} (V) Max	Breakdown Voltage V_{BR} @1mA (V) Min	Clamping Voltage V_c @ 1 A (V) Max	Leakage Current I_R @ V_{wm} (uA) Max	Capacitance (f = 1MHz) C @ 0V (pF) Max	Temperature Coefficient of V_{BR} a(V_{BR}) mv/°C Max
S14C03-8	3.3	4	7	200	300	-5
S14C05-8	5.0	6	9.8	40	200	1
S14C12-8	12.0	13.3	19	1	80	8
S14C15-8	15.0	16.7	24	1	70	11
S14C24-8	24.0	26.7	43	1	45	28
S14C36-8	36.0	40	51	1	35	-

Ratings and Characteristics Curves

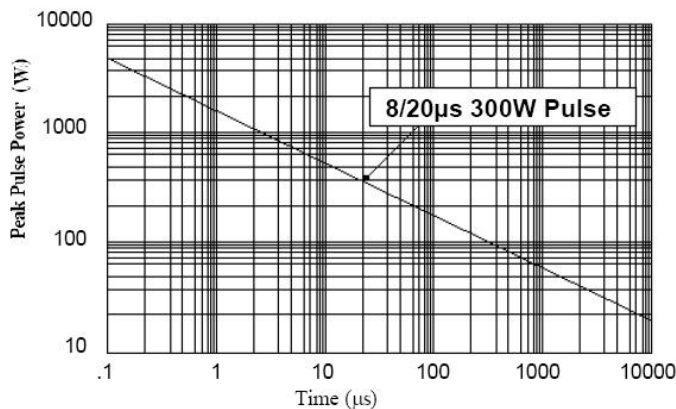


Figure 1. Peak Pulse Power Vs Pulse Time (µs)

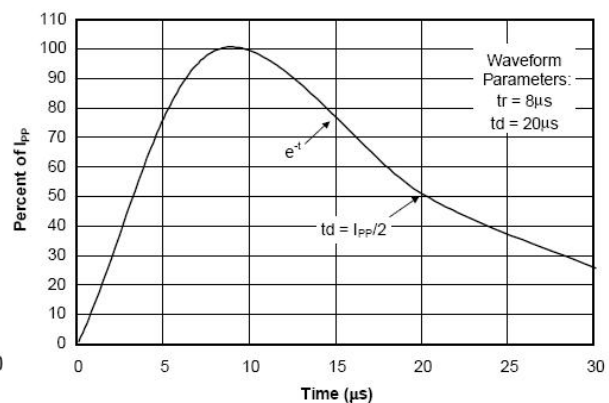


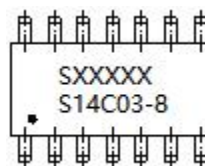
Figure 2. Pulse Wave Form

Ordering Information

Device	Package	Shipping
S14C03-8 THRU S14C36-8	SO-14 (Pb-Free)	2500pcs / reel
S14C03-8TR THRU S14C36-8TR	SO-14 (Pb-Free)	2500pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram



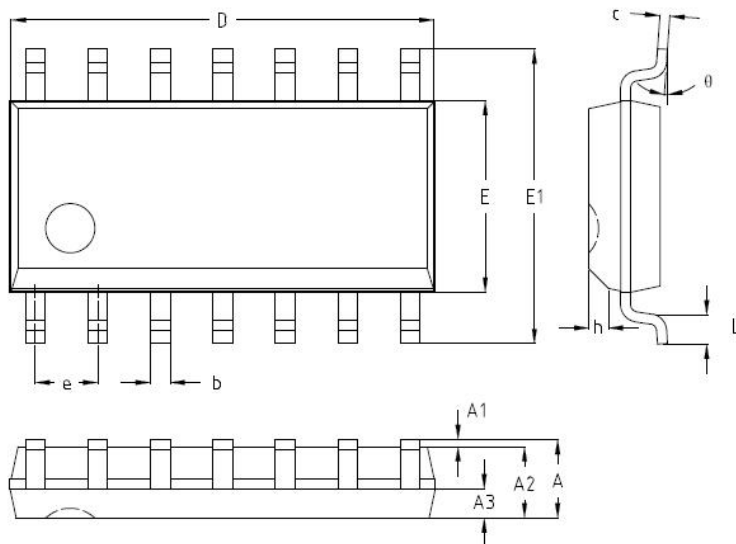
Where XXXXX is YYWWL

S14C03-8 = Part Name
S = S
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL:94V-0

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - sales@smc-diodes.com •

Mechanical Dimensions SO-14



SYMBOL	Millimeters		
	MIN.	Normal	MAX.
A	-	-	1.75
A1	0.05	-	0.09
A2	1.35	1.45	1.55
A3	0.60	0.65	0.70
b	0.35	-	0.50
c	0.19	-	0.25
D	8.50	8.60	8.70
E	3.80	3.90	4.00
E1	5.80	6.00	6.20
e	1.27(BSC)		
h	0.30	-	0.50
L	0.40	-	0.80
theta	0°	-	8°



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