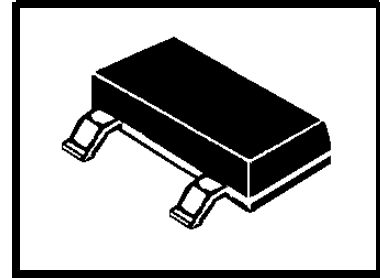


# SL03-SL24

## TVS Array Series

### DESCRIPTION (300 watt)

This 3 pin **ULTRA LOW CAPACITANCE** TRANSIENT VOLTAGE SUPPRESSOR is designed for use in applications where protection is required at the board level from voltage transients caused by electrostatic discharge (ESD) as defined by IEC 1000-4-2, electrical fast transients (EFT) per IEC 1000-4-4.



This product provides **unidirectional** protection for 1 line by connecting the Input/Output line to pin 1, pin 2 to common or ground and pin 3 (is not connected). The SL03 thru SL24 product provides board level protection from static electricity and other induced-voltage surges that can damage sensitive circuitry.

These TRANSIENT VOLTAGE SUPPRESSOR (TVS) Diode Arrays protect 3.0/3.3 Volt components such as DRAM's, SRAM's, CMOS, HCMOS, HSIC, and low voltage interfaces up to 24 Volts. Because of the physical size, weight and protection capabilities, this product is ideal for use in but not limited to miniaturized electronic equipment such as hand held instruments, computers, computer peripherals and cell phones.

### FEATURES

- Protects 3.0/3.3 up through 24V Components
- Protects 1 Unidirectional line
- Provides electrically isolated protection
- SOT-23 Packaging

### PACKAGING

- Tape & Reel EIA Standard 481
- 7 inch reel 5,000 pieces
- 13 inch reel 10,000 pieces

### MAXIMUM RATINGS

- Operating Temperatures: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- SL03 thru SL24 have a Peak Pulse Power: 300 Watts (8/20  $\mu$ sec, Figure 1)
- Pulse Repetition Rate: <.01%

### MECHANICAL

- Molded SOT-23 Surface Mount
- Weight: .014 grams (approximate)
- Body Marked with device number

### ELECTRICAL CHARACTERISTICS @ 25°C Unless otherwise specified

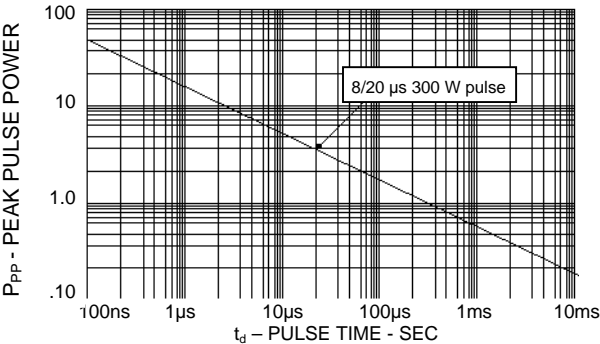
PART NUMBER	DEVICE MARKING	STAND OFF VOLTAGE $V_{WM}$	BREAKDOWN VOLTAGE $V_{BR}$ @ 1 mA	CLAMPING VOLTAGE $V_C$ @ 1 Amp (FIGURE 2)	CLAMPING VOLTAGE $V_C$ @ 5 Amp (FIGURE 2)	LEAKAGE CURRENT $I_D$ @ $V_{WM}$	CAPACITANCE @ 0V, 1 MHz	TEMPERATURE COEFFICIENT OF $V_{BR}$
		VOLTS	VOLTS	VOLTS	VOLTS	$\mu$ A	pF	mV/°C
		MAX	MIN	MAX	MAX	MAX	MAX	MAX
SL03	L03	3.3	4	8	11	200	5	-5
SL05	L05	5.0	6.0	9.8	11	100	5	3
SL12	L12	12.0	13.3	19	26	1	5	10
SL15	L15	15.0	16.7	25	32	1	5	13
SL24	L24	24.0	26.7	44	57	1	5	30

**NOTE:** Transient Voltage Suppression (TVS) product is normally selected based on its stand off Voltage  $V_{WM}$ . Product selected voltage should be equal to or greater than the continuous peak operating voltage of the circuit to be protected.

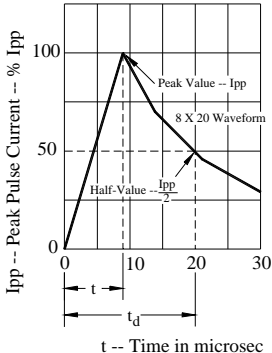
# SL03-SL24

TVS Array Series

## WAVE FORMS



**FIGURE 1**  
Peak Pulse Power Vs Pulse Time



**FIGURE 2**  
Pulse Wave Form

