



Microsemi

SCOTTSDALE DIVISION

USB50403C thru USB50424C, e3

Bidirectional TVSarray™

www.Microsemi.com

USB504xxC, e3

SYMBOLS & DEFINITIONS

Symbol	Definition
V_{WM}	Stand Off Voltage: Maximum dc voltage that can be applied over the operating temperature range. V_{WM} must be selected to be equal or be greater than the operating voltage of the line to be protected.
V_{BR}	Minimum Breakdown Voltage: The minimum voltage the device will exhibit at a specified current
V_C	Clamping Voltage: Maximum clamping voltage across the TVS device when subjected to a given current at a pulse time of 20 μ s.
I_D	Standby Current: Leakage current at V_{WM} .
C	Capacitance: Capacitance of the TVS as defined @ 0 volts at a frequency of 1 MHz and stated in picofarads.

GRAPHS

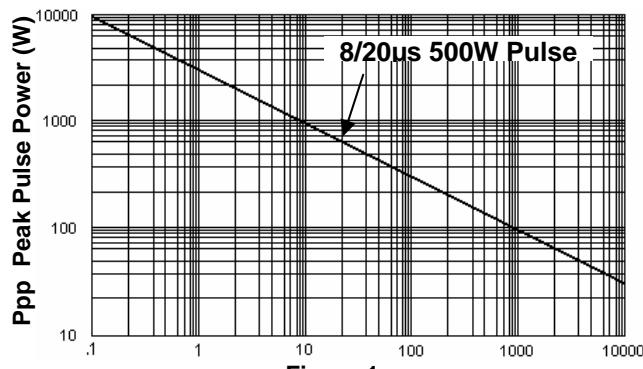


Figure 1
Peak Pulse Power Vs Pulse Time $t = \mu$ sec

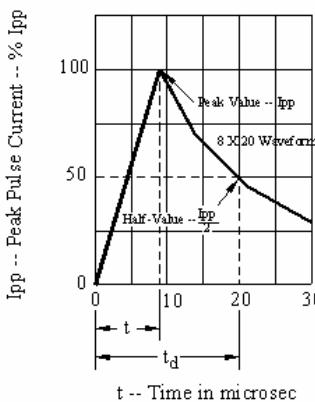
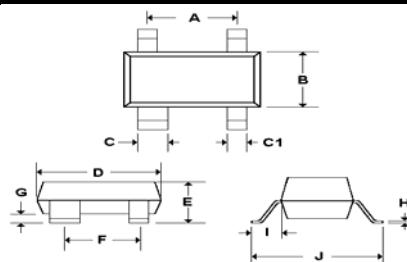
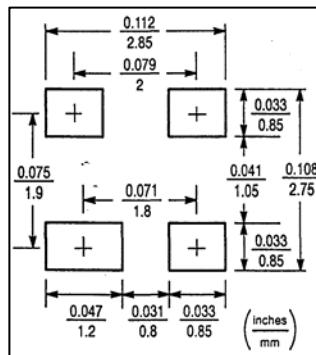


Figure 2
Pulse Wave Form

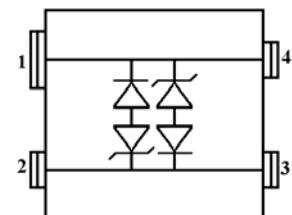
OUTLINE AND SCHEMATIC



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.070	0.080	1.78	2.03
B	0.047	0.053	1.20	1.40
C	0.027	0.033	0.69	0.84
C1	0.012	0.018	0.30	0.46
D	0.107	0.113	2.72	2.87
E	0.042	0.045	1.07	1.14
F	0.067	0.079	1.70	2.01
G	0.002	0.008	0.051	0.20
H	0.003	0.009	0.076	0.23
I	0.018	0.023	0.46	0.58
J	0.083	0.093	2.11	2.36



PAD LAYOUT



SCHEMATIC

OUTLINE