

# PRODUCT CAPABILITY SHEET

## Monolithic Flip Chip Thyristor Surge Protection Device Array for Implantable Applications

### Performance Advantages

- 50% real estate reduction over competition
- On State Dissipation is 1.5 to 2 times less than competition
- Switching Characteristics - (ton) - up to 10 times faster
- Can handle 3 times the surge as competition for the same physical area
- Custom designs in 3-4 weeks (competition does not offer custom arrangements)

### Features

- Monolithic Flip Chip Construction, all contacts on one side
- Available with solderable surface
- Common Anode/Cathode available
- Available in 2, 3, 4, 5, 6, 8 element arrays (see outlines below)
- Available in 5-8.5 Volt versions
- Power Rating is 50 Joules at 37°C
- Also available in TVS (TVSMEDA Series)

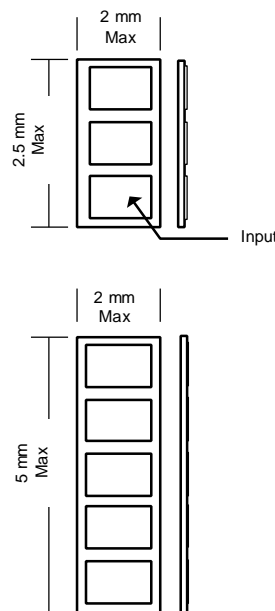
### Proposed Maximum Ratings @ 37°C-Body Temperature (unless otherwise specified)

Part Number	VDRM Volts MAX	VZ Volts MIN	VBO Volts MAX	I <sub>BO</sub> mA MAX	I <sub>H</sub> mA MIN	V <sub>T</sub> @1 A Volts MAX	V <sub>T</sub> @8 A Volts MAX	I <sub>TSM</sub> Amps MAX	I <sub>R</sub> @ VWM nA MAX	ton nsec MAX	Vc 1kV/us @ 50Ω Volts MAX	Co @ 0V pF MAX
TSPDMEDA001-5	5	6	8	20	1	3	6	30	100	500	10	100
TSPDMEDA001-7.5	7.5	8	12	20	1	3	6	30	100	500	15	100
TSPDMEDA001-8.5	8.5	9	12	20	1	3	6	30	100	500	15	100

### Monolithic Flip Chip Configurations (in development)

These Monolithic Arrays will feature multiple devices on one chip with all contacts on one surface. The surfaces are available with a solderable metal contact.

For more information on these devices contact Microsemi's Santa Ana division for custom configurations and designs.



### Elementary Cell Schematic

