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Progress Powered by Technology

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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)

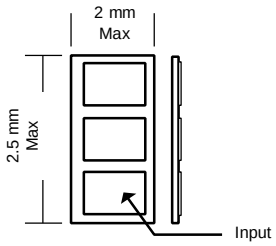
Proposed Maximum Ratings @ 37°C-Body Temperature (unless otherwise specified)

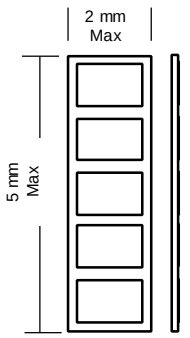
Part Number	V_{DRM} Volts MAX	V_Z Volts MIN	V_{BO} Volts MAX	I_{BO} mA MAX	I_H mA MIN	V_T @1 A Volts MAX	V_T @8 A Volts MAX	I_{TSM} Amps MAX	I_R @ VWM nA MAX	t_{on} nsec MAX	V_C 1kV/us @ 50Ω Volts MAX	C_O @ 0V pF MAX
TSPDMEDA001-5	5	6	8	20	1	3	6	30	100	500	10	100
TSPDMEDA001-7.5	7.5	8	12	20	1	3	6	30	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

