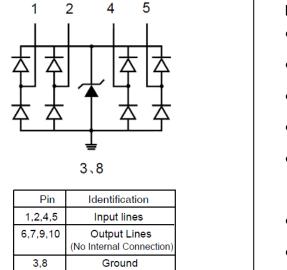
# 0524P סאט**ד Caн <o** 5 Volts ESD Protection Device

### DFN2510 Pin Configuration



#### Features

- Protects four(4) I/O lines
- Low clamping voltage
- 150W peak pulse power (tp=8/20us)
- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/ ("P" Suffix designates

Compliant. See ordering information)

- Epoxy meets UL 94 V-0 flammability rating
- Small package saves board space

### Absolute Maximum Ratings $(T_c=25 \ ^{\circ}C, unless otherwise noted)$

Operating Junction & Storage Temperature: -55 C to +150 C

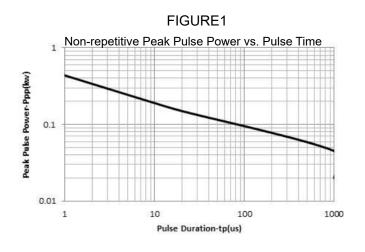
| Parameter                     |                | Symbol | Limits    | unit |
|-------------------------------|----------------|--------|-----------|------|
| IEC61000-4-2(ESD)             | Air<br>Contact | Vesd   | ±15<br>±8 | KV   |
| Peak Pulse Current : @ 8/20us |                | Ірр    | 5         | А    |
| Peak Pulse Power: @ 8/20us    |                | Ррр    | 150       | W    |

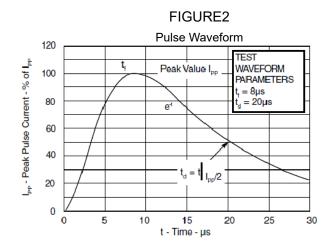
### Electrical Characteristics per line (TJ=25 °C, unless otherwise noted)

| Parameter                 | Symbol               | Conditions                                  | Min. | Тур. | Max.       | Units |
|---------------------------|----------------------|---|------|------|------------|-------|
| Reverse Stand-off Voltage | Vrwm                 | Any I/O Pin to GND                          |      |      | 5          | V     |
| Reverse Breakdown Voltage | Vbr                  | Iz = 1mA Any I/O Pin to GND                 | 6.1  |      | 8.5        | V     |
| Reverse Leakage Current   | lr                   | V <sub>RWM</sub> = 5V<br>Any I/O Pin to GND |      |      | 0.9        | uA    |
| Forward Voltage           | VF                   | I⊧=15mA<br>GND to any I/O Pin               |      |      | 1.15       | V     |
| Junction Capacitance      | Ci/o-gnd<br>Ci/o-i/o | V <sub>R</sub> =0V f = 1MHz                 |      |      | 0.8<br>0.4 | pF    |
| Clamping Voltage          | Vc                   | Ipp=1A tp=8/20 us                           |      | 9.5  | 11         | V     |
| Clamping Voltage          | Vc                   | Ipp=5A tp=8/20 us                           |      | 15   | 18         | V     |

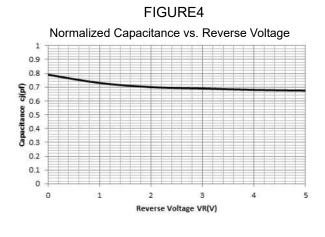
## 0524P סאט**כ כאוו Caн (o** 5 Volts ESD Protection Device

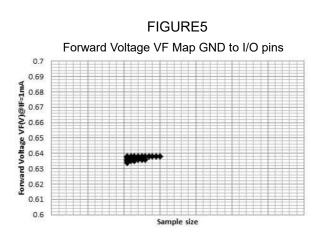
### **Typical Characteristics**

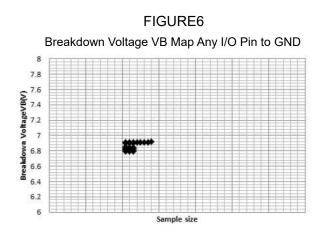




**FIGURE3** Power Derating Curve 120 100 % of Rated power 80 60 40 20 0 0 25 50 75 100 125 150 Ambient Temperature -TA(°C)





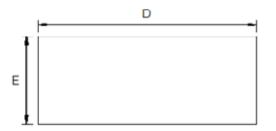


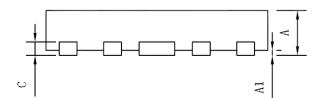
# 0524P סאט**ד cah <o** 5 Volts ESD Protection Device

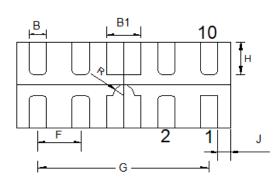
### **Ordering Information (Example)**

| PREFERED P/N | UNIT WEIGHT(mg)  | MINIIMUM<br>PACKAGE(pcs) | INNER BOX<br>QUANTITY(pcs) | OUTER CARTON<br>QUANTITY(pcs) | DELIVERY MODE |
|--------------|------------------|--------------------------|----------------------------|-------------------------------|---------------|
| 0524P        | Approximate 3.48 | ЗК                       | 30K                        | 120K                          | Tape & Reel   |

#### **Outline Dimensions**

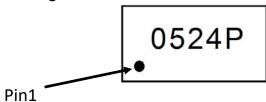






| SYMBOL | MILLIMETER  |      |      |  |  |
|--------|-------------|------|------|--|--|
| STWBUL | MIN         | NOM  | MAX  |  |  |
| Α      | 0.40        | 0.45 | 0.50 |  |  |
| A1     |             | 0.02 | 0.05 |  |  |
| B      | 0.15        | 0.20 | 0.25 |  |  |
| B1     | 0.35        | 0.40 | 0.45 |  |  |
| С      | 0.10        | 0.15 | 0.20 |  |  |
| D      | 2.45        | 2.50 | 2.55 |  |  |
| E      | 0.95        | 1.00 | 1.05 |  |  |
| F      | 0.50 BSC    |      |      |  |  |
| G      | 2.00 BSC    |      |      |  |  |
| H      | 0.30        | 0.38 | 0.46 |  |  |
| R      | 0.125 BSC   |      |      |  |  |
| J      | 0.10 0.15 0 |      | 0.20 |  |  |

### Marking



### 0524P

יאע**יס Caн (o** 5 Volts ESD Protection Device

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