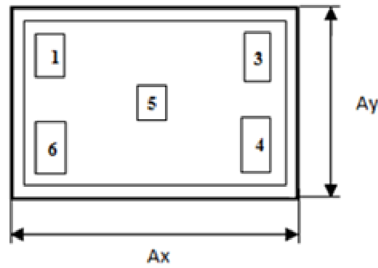
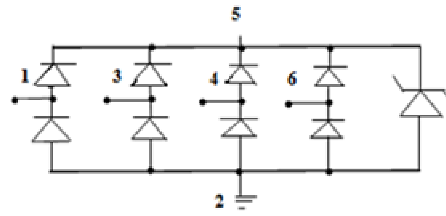
mikron VSP-MIKRON




Pin 2 – back side – GND

**Schematic and pinning diagram**

**Mechanical data:** $A_x$= 1000um, $A_y$=780um
Pad Size for Pin 1, 3, 4, 6 - 115 *170 um.
Pad Size for Pin 5 -115*100 um.
**Chip thickness:** 138+/-12um.
**Scribe Line width** - 40um.
**Top Metal:** AlSi - for wire bonding.
**Back side:** Ti-Ni-Ag for soldering
**Probing:**1) sampling testing: no bad dice inking guaranteed good dice quantity≥93%.
2) 100% testing (if agreed with customer): bad dice inking;

## Limiting values

| Parameter | Symbol | Conditions | Value | Unit |
|---|---|---|---|---|
| Peak pulse power | $P_{pp}$ | 8/20 uS pulse per diode | 240* | W |
| Peak pulse current | $I_{pp}$ | 8/20 uS pulse per diode | 12* | A |
| Electrostatic Discharge | ESD | IEC 61000-4-2, level 4 (ESD) | >15 (air);<br>>15 (contact) | kV |
| Max.junction temperature | $T_j$ | | 150 | ºC |

## Characteristics (Ta=25ºC)

| SYMBOL | PARAMETER | CONDITIONS | MIN. | TYP. | MAX. | UNIT |
|---|---|---|---|---|---|---|
| $V_{RWM}$ | Reverse Stand-Off Voltage. Pin 5 to 2. | | - | - | 5,0 | V |
| $I_R$ | Reverse leakage current. Pin 5 to 2. | $V_R$=+5,0 V | - | - | 5,0 | uA |
| $V_{BR}$ | Zener diode breakdown voltage. Pin 5 to 2. | $I_Z$=1mA | 5,8 | | | V |
| $V_F$ | Forward voltage | $I_F$=15mA | - | - | 1,15 | V |
| $V_{CL}$ | Clamping Voltage<br>Pins 1, 3, 4, 6 to 2. | $I_{pp}$=1A, $t_{pp}$=8/20uS;<br>Ipp=5A, tpp=8/20uS<br>Ipp=12A, tpp=8/20uS | - | - | 10,0*<br>15.0*<br>20,0* | V |
| $C_{I/O}$ | Capacitance to ground. (Pins 1, 3, 4, 6 to 2.) | $V_R$=0 V; f = 1 MHz. | - | 3,3 | 5,0 | pF |
| $C_{I/O-I/O}$ | Capacitance Between I/O pins. | Vr=0V; f=1MHz | - | 1,5 | - | pF |

*- For Device testing