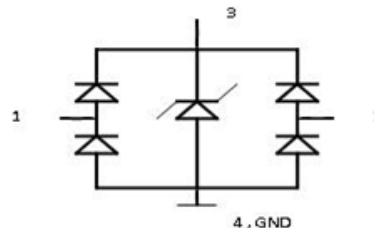


Pin 4 – back side – GND



Schematic and pinning diagram

Mechanical data: $A_x=490\mu\text{m}$, $A_y=300\mu\text{m}$

Pad Size for Pin 1, 2 - $90 \times 80 \mu\text{m}$.

Pad Size for Pin 3 - $120 \times 80 \mu\text{m}$.

Chip thickness: a) $138 \pm 12 \mu\text{m}$ on 4" wafer – for KSR-5.0V2M6A .

b) $470 \pm 20 \mu\text{m}$ on 4" wafer – for KSR-5.0V2M6B.

c) $655 \pm 20 \mu\text{m}$ on 6" wafer – for KSR-5.0V2M6C.

Scribe Line width - $60 \mu\text{m}$.

Top Metal: Al - for wire bonding.

Back side - Anode: a) Ti-Ni-Ag for soldering – for KSR-5.0V2M6A .

b) without metallization – for KSR-5.0V2M6B.

c) without metallization – for KSR-5.0V2M6C.

Probing: a) **sampling testing:** no bad dice inking guaranteed good dice quantity $\geq 93\%$;

b) **100% testing (if agreed with customer):** wafer mapping data no bad dice inking.

Limiting values

| Parameter | Symbol | Conditions | Value | Unit |
|---------------------------|-----------|-------------------------|-----------------------------|--------------------|
| Reverse Stand-off voltage | V_{RWM} | - | 5 | V |
| Peak Pulse Power | P_{pp} | $t_p=8/20\mu\text{s}$ | 100* | W |
| Peak Pulse Current | I_{pp} | $t_p=8/20\mu\text{s}$ | 5* | A |
| Electrostatic Discharge | V_{ESD} | IEC 61000-4-2, level 4. | >8 (Contact); >15 (Air). | kV |
| Max.junction temperature | T_j | - | +150 | $^{\circ}\text{C}$ |

Characteristics ($T_a=25^{\circ}\text{C}$)

| SYMBOL | PARAMETER | CONDITIONS | MIN. | TYP. | MAX. | UNIT |
|----------|-----------------------------------|--|------|------|------------|---------------|
| V_{BR} | Breakdown voltage, I/O to GND. | $I_R=1\text{mA}$ | 6,1 | 7,0 | - | V |
| I_R | Reverse leakage current | $V=5\text{V}$ | - | - | 0,9 | μA |
| V_F | Forward voltage | $I_F=15\text{mA}$ | - | - | 1,15 | V |
| V_{CL} | Clamping Voltage, I/O to GND | $I_{pp}=1.0\text{A}$, $t_p=8/20\mu\text{s}$ $I_{pp}=5.0\text{A}$, $t_p=8/20\mu\text{s}$ | - | - | 10* 20* | V |
| C_J | Capacitance. I/O to Ground | $V_R=0\text{V}$, $f=1\text{MHz}$ | - | 0,55 | 0,8 | pF |
| C_J | Capacitance between I/O pins. | $V_R=0\text{V}$, $f=1\text{MHz}$ | - | 0,25 | 0,4 | pF |

KSR-5.0V2M6A, KSR-5.0V2M6B, KSR-5.0V2M6C
Ultra Low Capacitance TVS diode. Analog Rclamp0522P &
2chips for RClamp0524P.
Preliminary May 2016.

*- For Device testing