



Pin 2 – back side – GND

Mechanical data: $A_x= 600\mu\text{m}$, $A_y=420\mu\text{m}$

Pad Size for Pin 1, 3, 4, 6 - $85 * 95 \mu\text{m}$.

Pad Size for Pin 5 - $270 * 105 \mu\text{m}$.

Chip thickness: a) $138 \pm 12 \mu\text{m}$ on 4" wafer – for KSR-5.0V4M1A .

b) $470 \pm 20 \mu\text{m}$ on 4" wafer – for KSR-5.0V4M1B.

c) $655 \pm 20 \mu\text{m}$ on 6" wafer – for KSR-5.0V4M1C.

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

Top Metal: Al - for wire bonding.

Back side - Anode: a) Ti-Ni-Ag for soldering – for KSR-5.0V4M1A .

b) without metallization – for KSR-5.0V4M1B.

c) without metallization – for KSR-5.0V4M1C.

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_{DD}	$t_p=8/20\mu\text{s}$	150*	W
Peak Pulse Current	I_{DD}	$t_p=8/20\mu\text{s}$	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 ($T_a=25^{\circ}\text{C}$)

PARAMETER	CONDITIONS	MIN	TYP.	MAX.	UNIT
Breakdown voltage	$I_R=1\text{mA}$. Pin 5 to Pin 2.	6,1	8,0	8,5	V
Reverse leakage current	$V=+5\text{V}$. Pin 1, 3, 4, 5, 6 to Pin 2. $V=-5\text{V}$. Pin 1, 3, 4, 6 to Pin 5.	-	-	0,9	μA
Forward voltage	$I_F=15\text{mA}$. Pin 2 to Pin 1, 3, 4, 5, 6.	-	-	0,95	V
Clamping Voltage	$I_{pp}=1.0\text{A}$, $t_p=8/20\mu\text{s}$ Pin 1, 3, 4, 6 to Pin 2.	-	-	15*	V
Clamping Voltage	$I_{pp}=5.0\text{A}$, $t_p=8/20\mu\text{s}$ Pin 1, 3, 4, 6 to Pin 2.	-	-	28*	V
Capacitance. Any I/O pin to Ground	$V_R=0\text{V}$, $f=1\text{MHz}$	-	-	0,8	pF
Capacitance. Any I/O pin to I/O	$V_R=0\text{V}$, $f=1\text{MHz}$	-	-	0,4	pF

*- For Device testing