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**AC-SOLID-STATE RELAY K294KII8AII3 ±600V / 0,5A**

ИКАИИ.431156.004ТУ ГК

<p><u>Peculiarities:</u></p> <ul style="list-style-type: none"> <li>- Operating Voltage ~260 V</li> <li>- Switching-on at zero crossing</li> <li>- Control current 5 mA</li> <li>- 5 000 V Dielectric strength</li> <li>- 4-pin plastic SIP, Pin step 2,5 mm</li> </ul> <p><u>Application:</u></p> <ul style="list-style-type: none"> <li>- industrial automation</li> <li>- power interface</li> </ul>	<p style="text-align: center;">Circuit diagram</p>	<p style="text-align: center;">Outline drawing</p> <p style="text-align: center;">Marking: a white spot at the 6<sup>th</sup> pin</p>
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**ELECTRICAL PARAMETERS**  $T_{amb} = 25\text{ }^{\circ}\text{C}$

Parameter name	Sign	Unit	Value			Measurement mode
			Min.	Typ.	Max.	
Input Voltage	$U_i$	V	1,1		1,5	$I_i=10\text{mA}$
On-state Voltage	$R_{on}$	V		1,5	2	$I_i=5\text{mA}; I_o=0,5\text{A}; t=1\text{sec.}$
Output Leakage Current in OFF condition	$I_{leak}$	$\mu\text{A}$		0,1	100	$U_i=0,8\text{V}; U_o=\pm 600\text{V}$
Inhibit Voltage	$U_{inh}$	V		5	20	$I_i=10\text{mA}$
Output Leakage Current in inhibited state	$I_{leak.inh}$	$\mu\text{A}$			500	$I_i=10\text{mA}; U_o=\pm 600\text{V}$
Dielectric Strength: Input-Output	$U_{diel.s}$	V	5000			$t=1\text{min.}$
Insulation Resistance	$R_{ins}$	Ohm		$10^{11}$		$U_{diel.s}=500\text{V}$
Input-Output Capacitance	$C_{i-o}$	pF		3		
Turn-on time	$t_{on}$	ms		5		

**PERMISSIBLE OPERATING CONDITIONS**

Condition parameters	Units	Min.	Max.	Note
Input on-state Current	mA		25	
Peak Input Current	mA		150	$t_i < 100\mu\text{s}$
Input off-state Voltage	V	-3,5	0,8	
Operating Voltage	V	20	600	
Irms	A	0,05	0,5	$-45^{\circ}\text{C} \leq T_{amb} \leq 25^{\circ}\text{C}; I_i=5\text{mA}$
Temperature coefficient of max. Irms	$\text{mA}/^{\circ}\text{C}$		- 5,1	$25^{\circ}\text{C} < T_{amb} \leq 85^{\circ}\text{C}; I_i=5\text{mA}$
Pulse Load Current	A		5	$T_{amb}=25^{\circ}\text{C}; I_i=5\text{mA}; t=100\text{ms}; \text{Duty Cycle}=50\%$
Temperature coefficient of max. Pulse Load Current	$\text{mA}/^{\circ}\text{C}$		-40	$25^{\circ}\text{C} < T_{amb} \leq 85^{\circ}\text{C}; I_i=5\text{mA}$
Critical Rate of Rise of Output off-state Voltage	$\text{V}/\mu\text{s}$		50	
Operating Temperature Range	$^{\circ}\text{C}$	-45	85	