

Snubber/pulse Capacitors for Power Electronics  
KS1122K205S010 DATD SHEET

**SCR**

Ordering code:	KS1122K205S010
Standards:	IEC 61071 UL 810
Characteristics	
Rated capacitance (C <sub>N</sub> )	2.0 μF±10%
Rated voltage (U <sub>NDC</sub> )	1200V
rms voltage (U <sub>rms</sub> )	550 V
Non-recurrent surge voltage (U <sub>s</sub> )	1800 V
Maximum rate of voltage rise (du/dt) <sub>max</sub>	520 V/μs
Maximum current (I <sub>max</sub> )	12 A @100kHz @70 °C
Maximum peak current( $\hat{I}$ )	1040A
Series resistance (R <sub>s</sub> )	2.4 mΩ @100kHz
Dissipation factor (tan δ)	≤ 5.0 × 10 <sup>-4</sup> @1kHz / 20°C
Test voltage between terminals (U <sub>TT</sub> )	1800 VDC, 10s
Test voltage between terminals and case (U <sub>TC</sub> )	4000 VAC, 10s
Insulation Resistance	30000s @100Vdc /1min (25 ± 5°C).
Self inductance	≤25nH
Operating temperature range (case)	-40 °C ... +105°C
Max. permissible ambient temperature	+85°C, operation at rated power, rated current and natural cooling
Storage temperature Θ <sub>stg</sub>	-40 ... +105 °C
Damp heat test	- Test conditions
	Temperature : +40 °C
	Relative humidity : 93% ±2%
	Test duration : 56 days
	- Performances
	Capacitance change : ≤ ± 5%
	tgδ change: ≤50% of nominal value at 1 kHz
	Insulation resistance: ≤50% of limit value
Expected lifetime	100 000 h at U <sub>NDC</sub> @ Θ <sub>hs</sub> 85°C
	30 000 h at U <sub>RMS</sub> @ Θ <sub>hs</sub> 85°C
Fit rate	50 (100 000 h at U <sub>NDC</sub> @ Θ <sub>hs</sub> 85°C)

Designs

