

Snubber/pulse Capacitors for Power Electronics
KS2122K474A110 DATD SHEET

SCR

Ordering code:	KS2122K474A110
Standards:	IEC 61071 UL 810
Characteristics	
Rated capacitance (C _N)	0.47 μF±10%
Rated voltage (U _{NDC})	1200V
rms voltage (U _{rms})	550 V
Non-recurrent surge voltage (U _s)	1800 V
Maximum rate of voltage rise (du/dt) _{max}	830 V/μs
Maximum current (I _{max})	15 A @100kHz @60 °C
Maximum peak current(\hat{I})	390A
Series resistance (R _s)	4.6 mΩ @100kHz
Dissipation factor (tan δ)	≤ 5.0 × 10 ⁻⁴ @1kHz / 20°C
Test voltage between terminals (U _{TT})	1800 U _{NDC} , 10s
Test voltage between terminals and case (U _{TC})	4000 VAC, 10s
Insulation Resistance	30000s @100Vdc /1min (25 ± 5°C).
Self inductance	≤25nH/mm
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 _{stg}	-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 _{NDC} @ Θ _{hs} 85°C
	30 000 h at U _{RMS} @ Θ _{hs} 85°C
Fit rate	50 (100 000 h at U _{NDC} @ Θ _{hs} 85°C)

Designs

