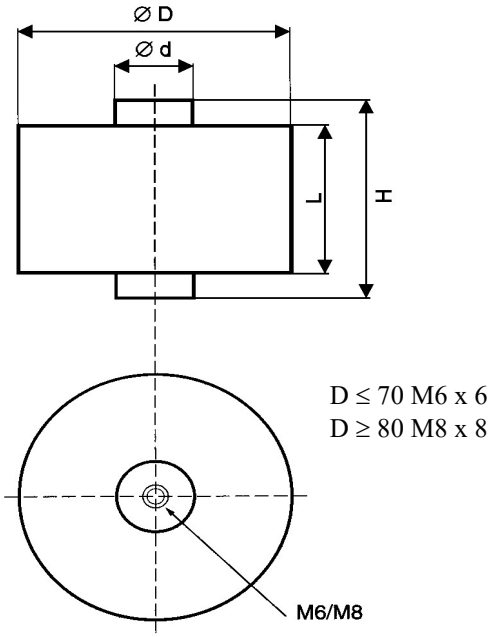
Elektronické součástky CZ, a.s.

CAPACITORS FOR HIGH PULSE AND GTO APPLICATIONS

KPI 308G

Dimensions:



Construction:
Metalized film electrodes with internal series connection. Non-inductive, self-healing construction, The windings are enclosed in a cylindrical plastic case, epoxy resin sealed, self-extinguishing, UL94-V0
Mechanical fixing and electrical contact are made by threaded holes M6 or M8 on the facing of the case.

Applications:
The capacitors are suitable to withstand high peak current loading as in protection of GTO, High ripple current filtering, medium frequency induction heating... The axial construction minimizes the series inductance, have very low series resistance and good thermal dissipation of heat.

Technical data

Rated voltage U_R Rated voltage is the max. DC or peak voltage, for which the capacitor is designed.
If the capacitor works with the DC and also super-imposed AC voltage U_{AC}, the sum of DC and the amplitude of AC must not exceed the U_R
Max permissible AC voltage U_{RMS} 50/60Hz,
If the working frequency is higher, the permissible AC voltage must be decreased, not to exceed the max. loss power of the capacitor.
Tolerance: ±10%, 5%, other tolerance on request
Dissipation factor Tgδ: < 0,0005 at 1kHz and +25ºC
Insulation resistance R_{IS}: 30 000/C [MΩ]
Operating temperature range: -40 ÷ +85ºC
Max permissible ambient temperature: +70ºC on case
The highest permissible capacitor temperature at the hottest point of the case must not exceed +85ºC.
Test voltage between terminals:
U_T, 2sec. at +25ºC All capacitors are tested by the routine test by the producer
Protection against Overvoltages:
The capacitors are self-healing and regenerate themselves after occasional breakdowns**.** The capacitor remains fully functional after the breakdown.
Non Recurrent Surge Voltage: U_{PK}
If the Overvoltages exceed the permissible value above, the capacitor might have been destroyed.
Test voltage between terminals and case:
3000V 50Hz, 1min. at +25ºC
Max. peak current I_p: < C_R x dU/dt
Mounting of capacitors: Max. tightening torque
For M6 screw = 6 Nm, for M8 screw = 10Nm
Related standards: IEC 60384-1
Marking for purchase ordering, sample:
KPI308G 12µF±5% 1500V DC

*Other capacitance on request
** If the ambient Temperature is higher as +40°C the I_{RMS} have to be reducet not to exceed Ta $_{MAX}$

C_R[µF]*	U_R	U_T	U_{RMS}	Dimensions +1[mm]				dU/dt	I_{RMS} **
	[V]	[V]	[V]	D	L	d	H	V/us	[A]
1,0	1500	1700	700	50	50	20	L+4	400	40
1,5	1500	1700	700	50	50	20	L+4	400	50
2,0	1500	1700	700	50	50	20	L+10	400	60
3,0	1500	1700	700	85	50	20	L+10	350	70
4,0	1500	1700	700	85	50	20	L+10	300	75
5,0	1500	1700	700	85	50	20	L+10	200	80
10	1500	1700	700	115	50	20	L+10	200	80
12	1500	1700	700	115	50	20	L+10	200	100

Warning! The manufacturer is not responsible for any damages, caused by the improper installation and application. Before using the capacitor in any application, pleas, read carefully this technical data-sheet.