

DATA SHEET Capacitor for Power Electronics acc. to IEC 61071

2009-11-20

360/09

			Date: Sign:	2009-1 EE4-36
Application:	DC/AC capacitor for general use in power electronics also for nonsinusoidal voltages and currents			
Order code:		60.0 dv (K)		
Standards:	acc. to IEC 61071:2007			
Characteristics				
Rated capacitance	C <sub>N</sub>	80 µF ±10%	outline drawing	
Rated d.c. voltage		900 V d.c.		
Rated a.c. voltage		400 V a.c.		
Max. rms voltage (sinusoidal)	U <sub>rms</sub>	280 V		
Non-recurrent surge voltage	u <sub>s</sub>	1350 V	I	
Rated energy	WN	32.4 Ws		
Maximum current	l <sub>max</sub>	80 A		
Maximum peak current		2 kA 6 kA		
Maximum surge current Series resistance	l <sub>s</sub>	0.25 mΩ _		
	R <sub>s</sub>	$2 \times 10^{-4}$		
Tangent of the loss angle	tanδ <sub>o</sub>			
Self discharge time const. Self-inductance	C x R <sub>is</sub>	5000 s 15 nH		
	Le	15 11		
Thermal conditions	0	05.00		
Lowest operating temperature	Θ <sub>min</sub>	-25 °C	20	
Maximum operating temperature	$\Theta_{max}$	85 °C	1 <del></del> 1	
Storage temperature	$\Theta_{storage}$	-40+85 °C	ØD <sub>1</sub>	
Thermal resistance	R <sub>th</sub>	4.7 K/W		
Humidity class		G		
failure rate		100 FIT*	M8×1	<u> </u>
reference service life		100000 h		
		100000 m ≤70 °C		
at <sub>Ohotspot</sub>		<u>&lt;</u> /0 C		
* See FIT-RATE diagram on pg.3				
Test data				
Voltage test between terminals	UTT	1350 V DC/10s		//
Dimensions				
Rated diameter	D <sub>1</sub>	105 (±1) mm		
Length of the case	L <sub>1</sub>	59 (±1) mm		
total Length	L <sub>2</sub>	66 (±1) mm		
Terminal	G	M8 x 10 mm		
Diameter of terminals	$D_2$	20 mm		
Clearance in air	L	129 mm		
Creepage distance	к	134 mm		
Approx weight		0.55 kg		
Mechanical characteristics				
Dielectric	metallized	polypropylene capacitor, sel	lfhealing	
Construction	plastic case with resin moulded winding, UL94: V0			
Protection	without internal fuse, to be used only in uncritical environment			
Terminals		e, inside thread		
Impregnant		pregnants, filled with solidif	ied PLIR resin non PCB	
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