EPCOS

Sample Kit 2011

SMD Disk Varistors (CU Varistors)

for Surge Current Protection

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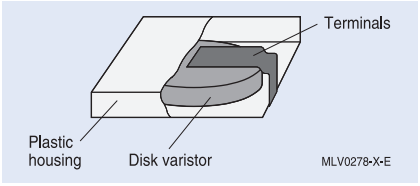
What are SMD disk varistors (CU varistors)?

- SMD disk varistors (also called CU varistors) are ceramic semiconductor components for surge current protection in consumer, telecom, industrial and automotive applications
- SMD disk varistors are encapsulated disk varistors for SMD mounting and they are electrical equivalents to leaded disk varistors SIOV-S05 (disk diameter 5 mm) in case size 3225 and SIOV-S07 (disk diameter 7 mm) in case size 4032



Construction of SMD disk varistors (CU varistors)

Benefits for customer applications

- SMD mountable disk varistors, suitable for lead-free soldering
- Bidirectional protection in a single component
- Maximum operating voltage up to 300 V_{RMS} / 385 V DC
- Maximum surge current capability (8/20 µs) up to 1200 A
- Special telecom and automotive (AUTO) series available
- High surge load capability to IEC 61000-4-5 for telecom series
- Jump start protection and load dump protection to ISO 7637, pulse 5 for automotive series
- RoHS-compatible, UL and CSA approved (types with higher operating voltage than 130 V_{RMS})
- No temperature derating up to 85 °C

Important information: Some parts o… oducts for certain areas of application. These statements are based on our knowledge… s. We expressly point out that these statements cannot be regarded as binding statements a… stomer application. It is incumbent on the customer to check and decide whether a product is suita… ublication is only a brief product survey which may be changed from time to time. Our products are describ… *important notes* (www.epcos.com/ImportantNotes) and the product-specific *Cautions and warnings* must be observed. All … mation is available through our sales offices.

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Product Range

Electrical parameters of SMD disk varistors (CU varistors) in the sample kit

Ordering code	EPCOS type	$V_{DC.\,max}$ [V]	$I_{surge,\,max}$ @ 8/20 µs [A]	W_{max} @ 2 ms [mJ]	$P_{diss,\,max}$ [mW]	V_V @ 1 mA [V]	$V_{clamp,\,max}$ [V]	I_{clamp} @ 8/20 µs [A]	C_{typ} [pF]
Standard series									
B72650M0600K072	CU3225K60G2	85	400	2200	100	100 ±10%	165	5	250
B72650M0271K072	CU3225K275G2	350	400	8600	100	430 ±10%	710	5	50
B72660M0271K072	CU4032K275G2	350	1200	21000	250	430 ±10%	710	10	95
B72650M0301K072	CU3225K300G2	385	400	9600	100	470 ±10%	775	5	45
B72660M0301K072	CU4032K300G2	385	1200	23000	250	470 ±10%	775	10	90
B72660M0481K072	CU4032K480G2	640	1000	40000	250	780 ±10%	1300	10	80
Automotive series									
Ordering code	**EPCOS type**	$V_{DC.\,max}$ [V]	$I_{surge,\,max}$ @ 8/20 µs [A]	W_{LD} 10 pulses [J]	V_{jump} 5 min [V]	V_V @ 1 mA [V]	$V_{clamp,\,max}$ [V]	I_{clamp} @ 8/20 µs [A]	
B72650M1140K072	CU3225K14AUTOG2	16	100	6	25	22 ±10%	43	1	
B72660M1140K072	CU4032K14AUTOG2	16	250	12	25	22 ±10%	43	2.5	

Standard CU3225 K60G2	Standard CU3225 K275G2	Standard CU4032 K275G2	Standard CU3225 K300G2	Standard CU4032 K300G2	Standard CU4032 K480G2	Automotive CU3225 K14AUTOG2	Automotive CU4032 K14AUTOG2

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