

Chip Multilayer Ceramic Capacitors for Automotive



2017

Safety Standard Certified Metal Terminal Type Multilayer Ceramic Capacitors for Automotive

KCA Series



For Automotive IEC60384-14 X1/Y2 Class Certified Product (Basic insulation product)

Features

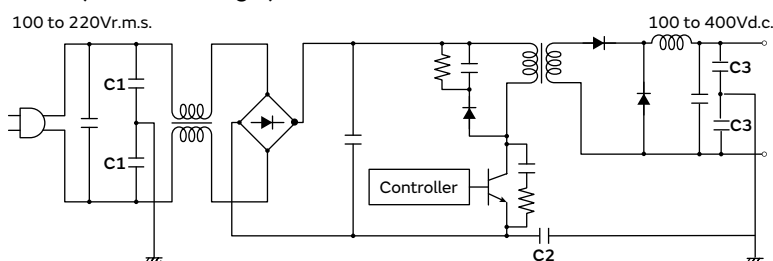
① International Standard (IEC60384-14) certified product: Rated voltage AC250V (r.m.s.).

Please down load Safety Standard Certification (Type MF: X1,Y2) from Web site.

② Best suitable for class Y2 capacitors.

AC250V (r.m.s.)-rated voltage, withstand voltage of AC2000V (r.m.s.) guaranteed for 60 seconds.

● OBC (On Board Charger)

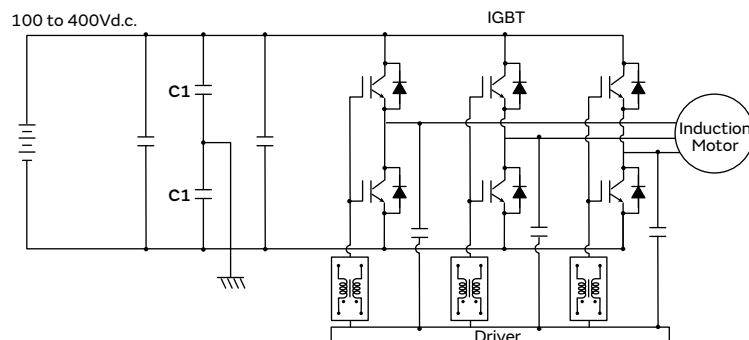


No.	Application
C1	Y Cap (Primary)
C2	Primary-Secondary Coupling
C3	Y Cap (Secondary)

③ Best suitable for DC input common mode noise filters.

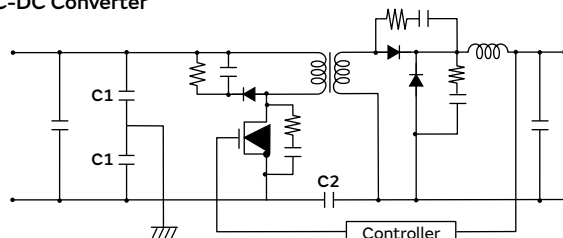
DC630V-rated voltage, withstand voltage of DC2700V guaranteed for 60 seconds.

● Inverter



No.	Application
C1	Common mode noise filters

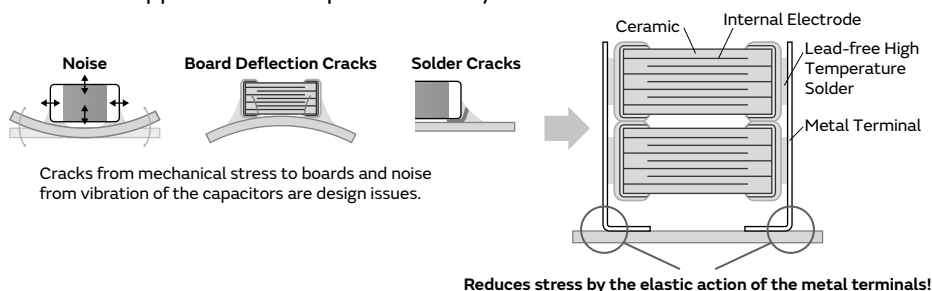
● DC-DC Converter



No.	Application
C1	Common mode noise filters
C2	Primary-Secondary Coupling

4 Bond metal terminals to the external electrodes of chips.

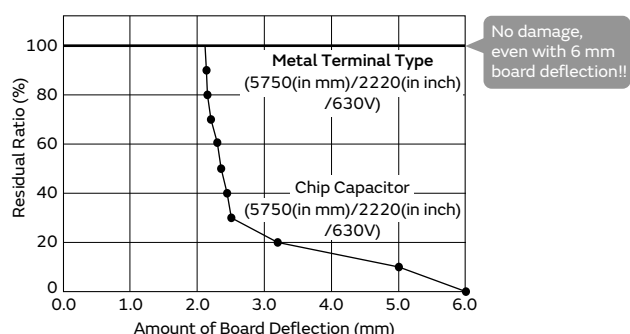
The stress applied to the chip is relieved by the elastic action of the metal terminal.



5 Substantially reduces board deflection cracks and soldering cracks.

This product is not damaged even with a board deflection of 6 mm.
Solder cracks do not occur even with 2,000 cycles of heat stress.

● Reduces Stress Caused by Board Deflection



● Suppresses Solder Cracks Caused by Heat Stress

Chip Size	Chip Only (5750 (in mm)/2220 (in inch) size)		Metal Terminal Type (5750 (in mm)/2220 (in inch) size)	
1000 Cycles				
2000 Cycles				

Test Condition: -55 to +125°C, 5min., (Liquid Phase)
Board Used: Glass Epoxy Board (FR-4)

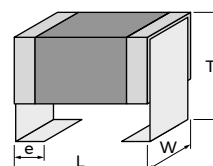
Compared with chips only, this product is excellent in solder cracking resistance.

6 2 chips can be stacked.

Realize large capacity by stacking 2 capacitors.

Specifications

Size	6.1×5.3mm
Rated Voltage	250Vac (r.m.s.)
Capacitance	100pF to 10000pF
Main Applications	Battery chargers, Inverter, DC-DC converters



<Dimensions>

KCA Series Temperature Compensating Type Part Number List

6.1×5.3mm

T max.	Rated Voltage	TC Code	Cap.	Tol.	Part Number	
3.0mm	250Vac(r.m.s.)	U2J	100pF	±10%	KCA55L7UMF101KH01#	
			150pF	±10%	KCA55L7UMF151KH01#	
			220pF	±10%	KCA55L7UMF221KH01#	
			330pF	±10%	KCA55L7UMF331KH01#	
			470pF	±10%	KCA55L7UMF471KH01#	
			680pF	±10%	KCA55L7UMF681KH01#	
			1000pF	±10%	KCA55L7UMF102KH01#	
			1500pF	±10%	KCA55L7UMF152KH01#	
			2200pF	±10%	KCA55L7UMF222KH01#	
			3300pF	±10%	KCA55L7UMF332KH01#	
3.9mm	250Vac(r.m.s.)	U2J	4700pF	±10%	KCA55Q7UMF472KH01#	
5.0mm	250Vac(r.m.s.)	U2J	6800pF	±20%	KCA55T7UMF682MH01#	
6.7mm	250Vac(r.m.s.)	U2J	10000pF	±20%	KCA55W7UMF103MH01#	

GRT Series

GCM Series

GC3 Series

GCM Series

GCD Series

GCE Series

NMF Series

KCM Series

KC3 Series

KCA Series

GCG Series

⚠Caution /Notice

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Murata:

<u>KCA55L7UMF332KH01L</u>	<u>KCA55L7UMF152KH01K</u>	<u>KCA55W7UMF103MH01K</u>	<u>KCA55L7UMF101KH01K</u>
<u>KCA55T7UMF682MH01K</u>	<u>KCA55L7UMF331KH01K</u>	<u>KCA55L7UMF222KH01K</u>	<u>KCA55Q7UMF472KH01K</u>
<u>KCA55W7UMF103MH01L</u>	<u>KCA55L7UMF101KH01L</u>	<u>KCA55L7UMF331KH01L</u>	<u>KCA55L7UMF681KH01L</u>
<u>KCA55L7UMF222KH01L</u>	<u>KCA55L7UMF332KH01K</u>	<u>KCA55L7UMF221KH01K</u>	<u>KCA55L7UMF152KH01L</u>
<u>KCA55Q7UMF472KH01L</u>	<u>KCA55L7UMF102KH01L</u>	<u>KCA55L7UMF151KH01K</u>	<u>KCA55T7UMF682MH01L</u>
<u>KCA55L7UMF471KH01L</u>	<u>KCA55L7UMF221KH01L</u>	<u>KCA55L7UMF471KH01K</u>	<u>KCA55L7UMF151KH01L</u>
<u>KCA55L7UMF681KH01K</u>	<u>KCA55L7UMF102KH01K</u>		