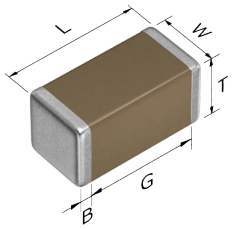
Creation Date : May 03, 2025 (GMT)

Multilayer Ceramic Chip Capacitors

CGA2B3X7S2A682K050BB

RoHS REACH Halogen Free Lead Free

TDK item description	CGA2B3X7S2A682KT****
Applications	Automotive Grade
Feature	AEC-Q200 AEC-Q200 Mid Mid Voltage (100 to 630V)
Series	CGA2(1005) [EIA 0402]
Status	Production (Not Recommended for New Design)
Brand	TDK



Size	
Length(L)	1.00mm ±0.05mm
Width(W)	0.50mm ±0.05mm
Thickness(T)	0.50mm ±0.05mm
Terminal Width(B)	0.10mm Min.
Terminal Spacing(G)	0.30mm Min.
Recommended Land Pattern (PA)	0.30mm to 0.50mm
Recommended Land Pattern (PB)	0.35mm to 0.45mm
Recommended Land Pattern (PC)	0.40mm to 0.60mm

Electrical Characteristics	
Capacitance	6.8nF ±10%
Rated Voltage	100VDC
Temperature Characteristic	X7S(±22%)
Dissipation Factor (Max.)	5%
Insulation Resistance (Min.)	10000MΩ

Other	
Operating Temp. Range	-55 to 125°C
Soldering Method	Reflow
AEC-Q200	YES
Packing	Punched (Paper)Taping [180mm Reel]
Package Quantity	10000pcs

! Images are for reference only and show exemplary products.
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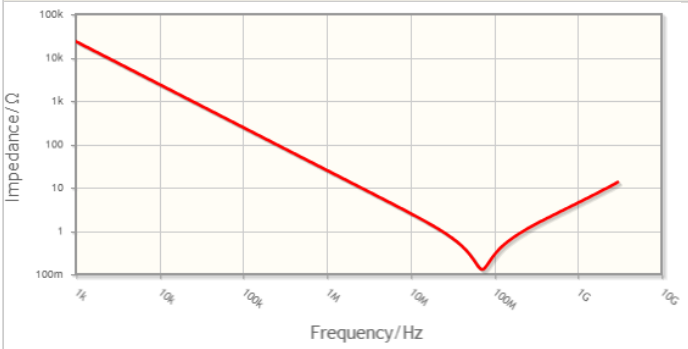
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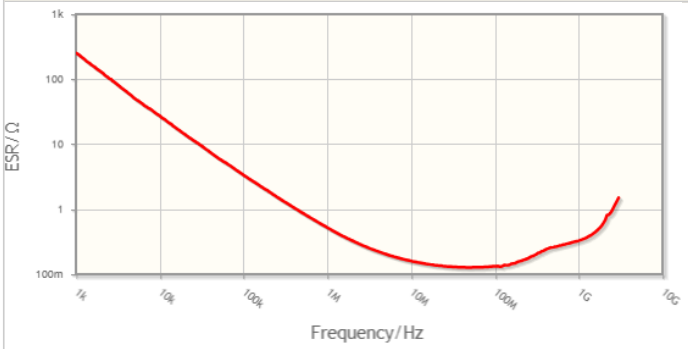
Characteristic Graphs(This is reference data, and does not guarantee the products characteristics.)

Impedance



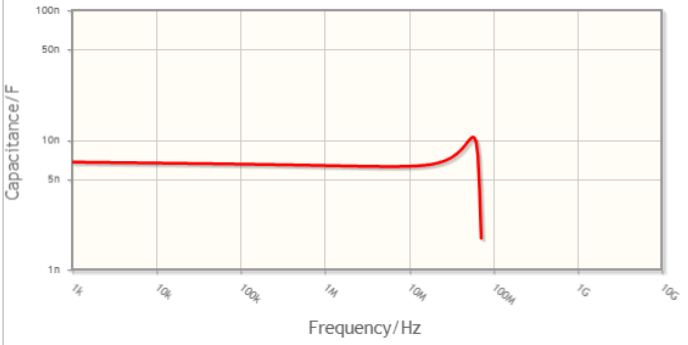
CGA2B3X7S2A682K050BB

ESR



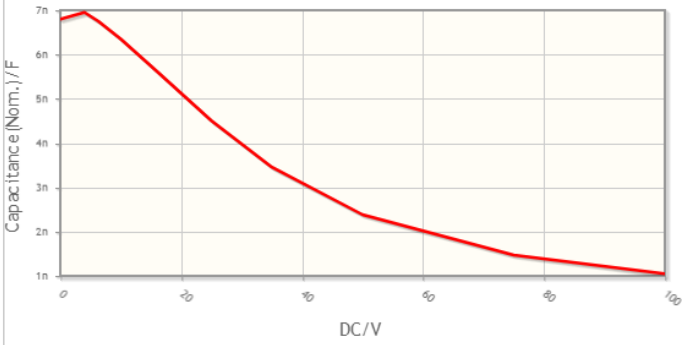
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Capacitance



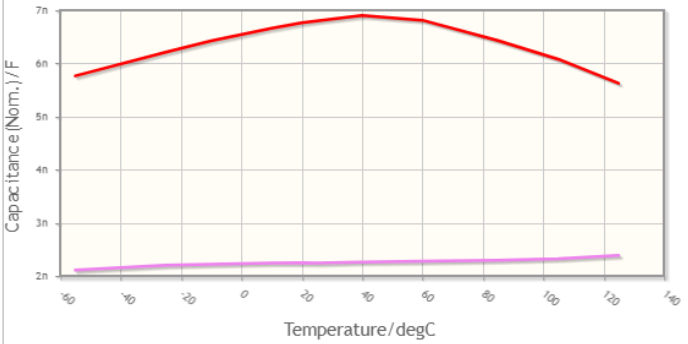
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DC Bias Characteristic



CGA2B3X7S2A682K050BB

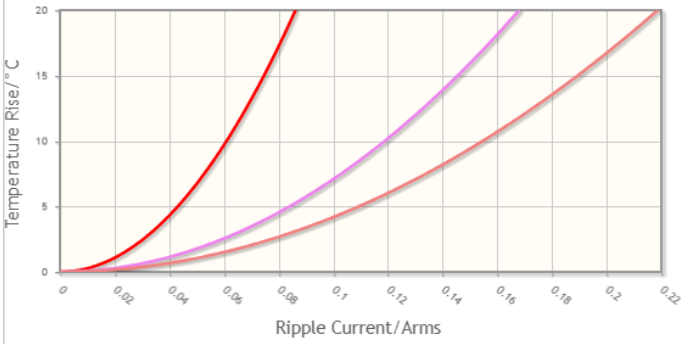
Temperature Characteristic



CGA2B3X7S2A682K050BB(No Bias)

CGA2B3X7S2A682K050BB(DC Bias = 50V)

Ripple Temperature Rising



CGA2B3X7S2A682K050BB(100kHz) CGA2B3X7S2A682K050BB(500kHz) CGA2B3X7S2A682K050BB(1MHz)

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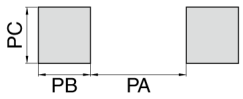
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Associated Images

Land Pattern (Terminal Connection)



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