

Product/Process Change Notification

PCN-083022-AGA Auto

Dielectric material formulation change.

Date:	ID Number (MMDDYY): 083022		
Affected Products	Product Line: X7R	Case Size: 0805	Cap: 105 (1.0 μ F), 225 (2.2 μ F),
	Voltage: see table.	Tolerances: All	C-spec's: AUTO, 3123, 3124, 3020, 3083, 3183, 3184, 3001, etc.
	Grade: Automotive	Termination: 100% Sn & Flexible Termination Automotive	

Change

KEMET has improved its dielectric material formulation ensuring additional supply of MLCCs to meet increasing customer demand. Qualification testing has been performed in accordance with the requirements of AEC Q200.

Standard Termination

Part Type	Length (mm)		Width (mm)		Thickness (mm)		DF (Max %)		IR MIN (Mohm)		pcs / reel (7in / 13in)
	Current	Planned	Current	Planned	Current	Planned	Current	Planned	Current	Planned	
0805 X7R 2.2 μ F 25V	2.0 \pm 0.30	2.0 \pm 0.30	1.25 \pm 0.20	1.25 \pm 0.20	1.25 \pm 0.15	1.25 \pm 0.20	10%	10%	45.5	45.5	2,500 / 10,000
0805 X7R 2.2 μ F 16V	2.0 \pm 0.30	2.0 \pm 0.30	1.25 \pm 0.20	1.25 \pm 0.20	1.25 \pm 0.15	1.25 \pm 0.20	10%	10%	45.5	45.5	2,500 / 10,000
0805 X7R 2.2 μ F 10V	2.0 \pm 0.30	2.0 \pm 0.30	1.25 \pm 0.20	1.25 \pm 0.20	1.25 \pm 0.15	1.25 \pm 0.20	10%	10%	45.5	45.5	2,500 / 10,000
0805 X7R 2.2 μ F 6.3V	2.0 \pm 0.30	2.0 \pm 0.30	1.25 \pm 0.20	1.25 \pm 0.20	1.25 \pm 0.15	1.25 \pm 0.20	10%	10%	45.5	45.5	2,500 / 10,000
0805 X7R 1.0 μ F 50V	2.0 \pm 0.30	2.0 \pm 0.30	1.25 \pm 0.20	1.25 \pm 0.20	1.25 \pm 0.20	1.25 \pm 0.20	10%	10%	100	100	2,500 / 10,000

Flexible Termination

Part Type	Length (mm)		Width (mm)		Thickness (mm)		DF (Max %)		IR MIN (Mohm)		pcs / reel (7in / 13in)
	Current	Planned	Current	Planned	Current	Planned	Current	Planned	Current	Planned	
0805 X7R 2.2 μ F 25V	2.0 \pm 0.35	2.0 \pm 0.35	1.25 \pm 0.30	1.25 \pm 0.30	1.25 \pm 0.15	1.25 \pm 0.30	10%	10%	45.5	45.5	2,500 / 10,000
0805 X7R 2.2 μ F 16V	2.0 \pm 0.35	2.0 \pm 0.35	1.25 \pm 0.30	1.25 \pm 0.30	1.25 \pm 0.15	1.25 \pm 0.30	10%	10%	45.5	45.5	2,500 / 10,000
0805 X7R 2.2 μ F 10V	2.0 \pm 0.35	2.0 \pm 0.35	1.25 \pm 0.30	1.25 \pm 0.30	1.25 \pm 0.15	1.25 \pm 0.30	10%	10%	45.5	45.5	2,500 / 10,000
0805 X7R 2.2 μ F 6.3V	2.0 \pm 0.35	2.0 \pm 0.35	1.25 \pm 0.30	1.25 \pm 0.30	1.25 \pm 0.15	1.25 \pm 0.30	10%	10%	45.5	45.5	2,500 / 10,000
0805 X7R 1.0 μ F 50V	2.0 \pm 0.35	2.0 \pm 0.35	1.25 \pm 0.30	1.25 \pm 0.30	1.25 \pm 0.20	1.25 \pm 0.30	10%	10%	100	100	2,500 / 10,000

Ordering Information

C	0805	C	225	K	3,4,8,9	R	A	C	AUTO
C	0805	C	105	K	5	R	A	C	AUTO
Cer	Case Size (LxW)	Specification / Series	Capacitance Code (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Diel.	Failure Rate/ Design	Termination Finish	Packaging/ Grade (C-Spec)
	0805	C= Standard X= Flexible Termination	Two significant digits + number of zeros.	J = \pm 5% K = \pm 10% M = \pm 20%	9 = 6.3V 8 = 10V 4 = 16V 3 = 25V 5 = 50V	R = X7R	A= N/A	C=100% Sn	AUTO = 7in T&R Automotive Grade

Effective Date and Identification	Target Implementation March 7 th , 2023
--	--

To Obtain Samples or General Information Contact	Ana Garza Technical Product Engineer Ceramic Product Business Unit KEMET Electronics Corporation Ana.Garza@yageo.com Craig Scruggs Director Product Management – Automotive Ceramics Ceramic Product Business Unit KEMET Electronics Corporation Craig.Scruggs@yageo.com
---	---

KEMET Proprietary Information
Entire Contents not to be shared without express written consent of KEMET Electronics Corporation.

KEMET Part Number

C0805C105J5RACAUTO
C0805C105J5RACAUTO7210
C0805C105K5RACAUTO
C0805C105K5RACAUTO7210
C0805C105M5RACAUTO
C0805C105M5RACAUTO7210
C0805C105K5RAC3123
C0805C225J9RACAUTO
C0805C225J9RACAUTO7210
C0805C225J8RACAUTO
C0805C225J8RACAUTO7210
C0805C225J4RACAUTO
C0805C225J4RACAUTO7210
C0805C225J3RACAUTO
C0805C225J3RACAUTO7210
C0805C225K3RACAUTO
C0805C225K3RACAUTO7210
C0805C225K4RAC30013123
C0805C225K4RAC3020
C0805C225K4RAC3123
C0805C225K4RAC31237665
C0805C225K4RAC3124
C0805C225K4RAC31247665
C0805C225K4RAC3183
C0805C225K4RAC3184
C0805C225K4RACAUTO
C0805C225K4RACAUTO3001
C0805C225K4RACAUTO7210
C0805C225K4RACAUTO7621
C0805C225K9RACAUTO
C0805C225K9RACAUTO7210
C0805C225K8RACAUTO
C0805C225K8RACAUTO7210
C0805C225K8RACAUTO3001
C0805C225M4RAC3123
C0805C225M4RACAUTO
C0805C225M4RACAUTO7210
C0805C225M9RACAUTO
C0805C225M9RACAUTO7210
C0805C225M8RACAUTO
C0805C225M8RACAUTO7210
C0805C225M3RACAUTO
C0805C225M3RACAUTO7210
C0805X105K5RAC3123

C0805X105J5RACAUTO
C0805X105J5RACAUTO7210
C0805X105K5RACAUTO
C0805X105K5RACAUTO7210
C0805X105M5RACAUTO
C0805X105M5RACAUTO7210
C0805X225K8RAC3124
C0805X225J3RACAUTO
C0805X225J4RACAUTO
C0805X225J8RACAUTO
C0805X225J9RACAUTO
C0805X225K3RACAUTO
C0805X225K4RACAUTO
C0805X225K8RACAUTO
C0805X225K9RACAUTO
C0805X225M3RACAUTO
C0805X225M4RACAUTO
C0805X225M8RACAUTO
C0805X225M9RACAUTO
C0805X225J3RACAUTO7210
C0805X225J4RACAUTO7210
C0805X225J8RACAUTO7210
C0805X225J9RACAUTO7210
C0805X225K3RACAUTO7210
C0805X225K4RACAUTO7210
C0805X225K8RACAUTO7210
C0805X225K9RACAUTO7210
C0805X225M3RACAUTO7210
C0805X225M4RACAUTO7210
C0805X225M8RACAUTO7210
C0805X225M9RACAUTO7210