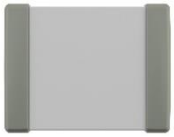
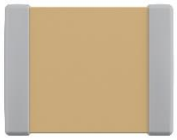
Product/Process Change Notification
PCN-071724-AGA

Dielectric material formulation change.

Product Line: SMD MLCC X8R Standard Termination		**ID Number (MMDDYY):** 071724
Affected Products	**Parts affected:** see table below	**C-specs:** TU, 7800, 7210, AUTO
	Grade: Commercial & Automotive	**Termination:** 100% Sn Standard Termination Only

Change: (see specifics under change details below)

Due to equipment and dielectric material capability KEMET is changing dielectric formulation to ensure supply of MLCCs and meet increasing customer demand. Currently, the affected MLCCs use a 16V design for the 10V, 16V rated options. This PCN will change the 10V, 16V rated options to utilize an existing 25V design. Qualification testing has been performed in accordance with the requirements of AEC Q200 and with our Performance & Reliability stated on Commercial Catalog. With this PCN, the MLCC color will change from white to brown without any changes to electrical specifications nor changes to ordering part number.

Characteristic	Current	Planned
Rated Voltage	10V & 16V	10V & 16V
Design Voltage	25V	25V
Color	White 	Brown 

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Ordering Information

C	0805	C	512	K	4	H	A	C	AUTO
Cer	Case Size (LxW)	Specification / Series	Capacitance Codes (pF)	Capacitance Tolerance	Rated Voltage (VDC)	Diel.	Failure Rate/ Design	Termination Finish	Packaging/ Grade (C-Spec)
		C= Standard Termination	202, 222, 242, 272, 302, 332, 362, 392, 432, 472, 512	F = ±1% G = ±2% J = ±5% K = ±10% M = ±20%	8 = 10V 4 = 16V	H = X8R	A= N/A	C=100% Sn	TU AUTO

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Effective Date and Identification	*Beginning implementation Date **11/18/24***
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 Corporation
KEMET Tower
One East Broward Blvd. | Fort Lauderdale, Florida, USA 33301
954.766.2800 | www.kemet.com

Change Details: Change in dielectric color

X8R Commercial and Automotive 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	Current	Planned
X8R 0805 2.0nF 16V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 2.0nF 10V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 2.2nF 16V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 2.2nF 10V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 2.4nF 16V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 2.4nF 10V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 2.7nF 16V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 2.7nF 10V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 3.0nF 16V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 3.0nF 10V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 3.3nF 16V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 3.3nF 10V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 3.6nF 16V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 3.6nF 10V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 3.9nF 16V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 3.9nF 10V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 4.7nF 16V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 4.7nF 10V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 4.7nF 16V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 4.7nF 10V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 5.1nF 16V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000
X8R 0805 5.1nF 10V	2.0 +/-0.20	2.0 +/-0.20	1.25+/-0.20	1.25+/-0.20	0.78+/-0.10	0.78+/-0.10	2.50	2.50	100,000	100,000	4,000/15,000	4,000/15,000

[X] Form
[ ] Fit
[ ] Function

Blue Font under "Planned" indicates a change.
Black Font under "Planned" indicates No change.

See Part Types affected below.