

Product/Process Change Notification
PCN-101623-AGA Auto
 Dielectric material formulation change.



	Product Line: X7R	ID Number (MMDDYY): 101623
Affected Products	Parts affected: see table below	C-specs: AUTO, 3190, 3191
	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	Current	Planned
X7R 0603 220nF 25V	1.60±0.15	1.60±0.15	0.80±0.15	0.80±0.15	0.80±0.07	0.80±0.07	5.0%	5.0%	2,272.70	2,272.70	4,000/15,000	4,000/15,000
X7R 0603 220nF 16V	1.60±0.15	1.60±0.15	0.80±0.15	0.80±0.15	0.80±0.07	0.80±0.07	5.0%	5.0%	2,272.70	2,272.70	4,000/15,000	4,000/15,000
X7R 0603 220nF 10V	1.60±0.15	1.60±0.15	0.80±0.15	0.80±0.15	0.80±0.07	0.80±0.07	5.0%	5.0%	2,272.70	2,272.70	4,000/15,000	4,000/15,000
X7R 0603 220nF 6.3V	1.60±0.15	1.60±0.15	0.80±0.15	0.80±0.15	0.80±0.07	0.80±0.07	5.0%	5.0%	2,272.70	2,272.70	4,000/15,000	4,000/15,000
X7R 0805 2.2uF 50V	2.00±0.30	2.00±0.40	1.25±0.20	1.25±0.30	1.25±0.20	1.25±0.30	10.0%	10.0%	45.50	45.50	2,500/10,000	2,500/10,000
X7R 0805 2.2uF 35V	2.00±0.30	2.00±0.40	1.25±0.20	1.25±0.30	1.25±0.20	1.25±0.30	10.0%	10.0%	45.50	45.50	2,500/10,000	2,500/10,000
X7R 1206 2.2uF 50V	3.20±0.20	3.20±0.20	1.60±0.20	1.60±0.20	1.60±0.20	1.60±0.20	10.0%	10.0%	45.50	45.50	2,000/8,000	2,000/8,000
X7R 1206 2.2uF 35V	3.20±0.20	3.20±0.20	1.60±0.20	1.60±0.20	1.60±0.20	1.60±0.20	10.0%	10.0%	45.50	45.50	2,000/8,000	2,000/8,000
X7R 1206 2.2uF 25V	3.20±0.20	3.20±0.20	1.60±0.20	1.60±0.20	1.60±0.20	1.60±0.20	10.0%	10.0%	45.50	45.50	2,000/8,000	2,000/8,000

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	Current	Planned
X7R 0603 220nF 25V	1.60±0.17	1.60±0.25	0.80±0.15	0.80±0.15	0.80±0.15	0.80±0.15	5.0%	5.0%	2,272.70	2,272.70	4,000/15,000	4,000/15,000
X7R 0603 220nF 16V	1.60±0.17	1.60±0.25	0.80±0.15	0.80±0.15	0.80±0.15	0.80±0.15	5.0%	5.0%	2,272.70	2,272.70	4,000/15,000	4,000/15,000
X7R 0603 220nF 10V	1.60±0.17	1.60±0.25	0.80±0.15	0.80±0.15	0.80±0.15	0.80±0.15	5.0%	5.0%	2,272.70	2,272.70	4,000/15,000	4,000/15,000
X7R 0603 220nF 6.3V	1.60±0.17	1.60±0.25	0.80±0.15	0.80±0.15	0.80±0.15	0.80±0.15	5.0%	5.0%	2,272.70	2,272.70	4,000/15,000	4,000/15,000
X7R 0805 2.2uF 50V	2.00±0.35	2.00±0.40	1.25±0.30	1.25±0.30	1.25±0.25	1.25±0.30	10.0%	10.0%	45.50	45.50	2,500/10,000	2,500/10,000
X7R 0805 2.2uF 35V	2.00±0.35	2.00±0.40	1.25±0.30	1.25±0.30	1.25±0.25	1.25±0.30	10.0%	10.0%	45.50	45.50	2,500/10,000	2,500/10,000
X7R 1206 2.2uF 50V	3.30±0.40	3.30±0.40	1.60±0.35	1.60±0.35	1.60±0.20	1.60±0.35	10.0%	10.0%	45.50	45.50	2,000/8,000	2,000/8,000
X7R 1206 2.2uF 35V	3.30±0.40	3.30±0.40	1.60±0.35	1.60±0.35	1.60±0.20	1.60±0.35	10.0%	10.0%	45.50	45.50	2,000/8,000	2,000/8,000
X7R 1206 2.2uF 25V	3.30±0.40	3.30±0.40	1.60±0.35	1.60±0.35	1.60±0.20	1.60±0.35	10.0%	10.0%	45.50	45.50	2,000/8,000	2,000/8,000

Ordering Information

C	0603	C	224	K	3,4,8,9	R	A	C	AUTO
C	0805	C	225	K	5,6	R	A	C	AUTO
C	1206	C	225	K	5,6,3	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)
		C= Standard X= Flexible Termination	Two significant digits + number of zeros.	J = ±5% K = ±10% M = ±20%	9 = 6.3V 8 = 10V 4 = 16V 3 = 25V 6 = 35V 5 = 50V	R = X7R	A= N/A	C=100% Sn	AUTO

Effective Date and Identification

Beginning implementation Date 05/31/24

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