NR = Not Recommended

Products			Dimensions (mm)			Weight (g)	Applications					Products	Frequency Range (MHz)	Conditions of Use				RoHS Compli-ant*	AEC	
Product Type	Page No.	Part Number	L	W	T (max.)		Digital Electronics OA, PC Peripherals Amusement	Car Electronics, ITS, Car Audio, Car Navigation	Car Electronics (ECU, Air Bag, ABS, TPMS etc.)	Mobile Comm. Wireless LAN Dedicatedd Short Range Comm.(DSRC)	Industrial Use (Broadcast, Medical, Base Station etc.)	Part Number	1 10 50 100 300 to 800	Solder			Washable		Q100	Q200
														Manual	Reflow	Flow				
Crystal Units	3	CT1612RB	1.6	1.2	0.65	0.0052				✓		CT1612RB	38.4 ---------- 76.8	Yes	Yes	No	Yes	Yes		
	4	CT2016DB (Low Profile)	2.0	1.6	0.65	0.0076				✓		CT2016DB (Low Profile)	19.2 38.4	Yes	Yes	No	Yes	Yes		
	4	CT2016DB	2.0	1.6	1.0	0.0109				✓		CT2016DB	19.2 38.4	Yes	Yes	No	Yes	Yes		
	5	CX1008SB	1.0	0.8	0.3/0.27	0.0010	✓			✓		CX1008SB	37.4---------- 80	Yes	Yes	No	Yes	Yes		
	6	CX1210DB	1.2	1.0	0.3	0.0016	✓			✓		CX1210DB	37.4---------- 80	Yes	Yes	No	Yes	Yes		
	7	CX1210SB	1.2	1.0	0.35	0.0016	✓			✓		CX1210SB	24 ---------- 80	Yes	Yes	No	Yes	Yes		
	8	CX1612DB	1.6	1.2	0.33/0.4	0.0029	✓			✓		CX1612DB	24 ---------- 76.8	Yes	Yes	No	Yes	Yes		
	9	CX2016DB	2.0	1.6	0.45	0.0056	✓					CX2016DB	16 ---------- 60	Yes	Yes	No	Yes	Yes		
	10	CX2016GR (for Automotive)	2.0	1.6	0.785	0.0081		✓	✓			CX2016GR (for Automotive)	16 ----------50	Yes	Yes	No	Yes	Yes		Yes
	11	CX2016SA (for Automotive)	2.0	1.6	0.5	0.0063	✓	✓	✓			CX2016SA (for Automotive)	16 ---------- 60	Yes	Yes	No	Yes	Yes		Yes
	12	CX3225CA (for Automotive)	3.2	2.5	0.9	0.0212		✓	✓			CX3225CA (for Automotive)	12 ---------- 54	Yes	Yes	No	Yes	Yes		Yes
	13	CX3225GA (for Automotive)	3.2	2.5	0.95	0.0231		✓	✓			CX3225GA (for Automotive)	8 ---------- 54	Yes	Yes	No	Yes	Yes		Yes
	14	CX3225GB	3.2	2.5	0.9	0.0212	✓					CX3225GB	12 ---------- 54	Yes	Yes	No	Yes	Yes		
	15	CX3225SA (for Automotive)	3.2	2.5	0.8	0.0200		✓	✓			CX3225SA (for Automotive)	8 ---------- 54	Yes	Yes	No	Yes	Yes		Yes
	16	CX3225SB	3.2	2.5	0.6	0.0191	✓			✓		CX3225SB	12 ---------- 54	Yes	Yes	No	Yes	Yes		
Clock Oscillators (SPXO)	19-20	KC2016Z (X type)	2.0	1.6	0.8	0.0071	✓			✓	✓	KC2016Z (X type)	0.5---------- 170	No	Yes	No	NR	Yes		
	19, 21	KC2016Z (Y type)	2.0	1.6	0.8	0.0071	✓			✓	✓	KC2016Z (Y type)	24 ---------- 72	No	Yes	No	NR	Yes		
	19-20	KC2520Z (X type)	2.5	2.0	0.8	0.0125	✓			✓	✓	KC2520Z (X type)	0.5---------- 170	No	Yes	No	NR	Yes		
	19, 21	KC2520Z (Y type)	2.5	2.0	0.8	0.0125	✓			✓	✓	KC2520Z (Y type)	24 ---------- 72	No	Yes	No	NR	Yes		
	19-20	KC3225Z (X type)	3.2	2.5	0.8	0.0127	✓			✓	✓	KC3225Z (X type)	0.5---------- 170	No	Yes	No	NR	Yes		
	19, 21	KC3225Z (Y type)	3.2	2.5	0.8	0.0127	✓			✓	✓	KC3225Z (Y type)	24 ---------- 72	No	Yes	No	NR	Yes		
	19-20	KC5032Z (X type)	5.0	3.2	1.2	0.0272	✓			✓	✓	KC5032Z (X type)	0.5---------- 170	No	Yes	No	NR	Yes		
	19, 21	KC5032Z (Y type)	5.0	3.2	1.2	0.0272	✓			✓	✓	KC5032Z (Y type)	24 ---------- 72	No	Yes	No	NR	Yes		
	19-20	KC7050Z (X type)	7.0	5.0	1.2	0.0367	✓			✓	✓	KC7050Z (X type)	0.5---------- 170	No	Yes	No	NR	Yes		
	19, 21	KC7050Z (Y type)	7.0	5.0	1.2	0.0367	✓			✓	✓	KC7050Z (Y type)	24 ---------- 72	No	Yes	No	NR	Yes		
	22-23	MC2016Z (X type)	2.0	1.6	0.8	0.0071		✓				MC2016Z (X type)	0.5---------- 170	No	Yes	No	NR	Yes	Yes (option)	Yes
	22, 24	MC2016Z (Y type)	2.0	1.6	0.8	0.0071		✓				MC2016Z (Y type)	24 ---------- 72	No	Yes	No	NR	Yes	Yes (option)	Yes
	22-23	MC2520Z (X type)	2.5	2.0	0.8	0.0125		✓				MC2520Z (X type)	0.5---------- 170	No	Yes	No	NR	Yes	Yes (option)	Yes
	22, 24	MC2520Z (Y type)	2.5	2.0	0.8	0.0125		✓				MC2520Z (Y type)	24 ---------- 72	No	Yes	No	NR	Yes	Yes (option)	Yes
	22-23	MC3225Z (X type)	3.2	2.5	0.8	0.0127		✓				MC3225Z (X type)	0.5---------- 170	No	Yes	No	NR	Yes	Yes (option)	Yes
	22, 24	MC3225Z (Y type)	3.2	2.5	0.8	0.0127		✓				MC3225Z (Y type)	24 ---------- 72	No	Yes	No	NR	Yes	Yes (option)	Yes
	22-23	MC5032Z (X type)	5.0	3.2	1.2	0.0272		✓				MC5032Z (X type)	0.5---------- 170	No	Yes	No	NR	Yes	Yes (option)	Yes
	22, 24	MC5032Z (Y type)	5.0	3.2	1.2	0.0272		✓				MC5032Z (Y type)	24 ---------- 72	No	Yes	No	NR	Yes	Yes (option)	Yes
	22-23	MC7050Z (X type)	7.0	5.0	1.2	0.0367		✓				MC7050Z (X type)	0.5---------- 170	No	Yes	No	NR	Yes	Yes (option)	Yes
	22, 24	MC7050Z (Y type)	7.0	5.0	1.2	0.0367		✓				MC7050Z (Y type)	24 ---------- 72	No	Yes	No	NR	Yes	Yes (option)	Yes
	25-26	KC2016K (32.768kHz)	2.0	1.6	0.8	0.0070	✓			✓	✓	KC2016K (32.768kHz)	0.032768	No	Yes	No	NR	Yes		
	25-26	KC2520K (32.768kHz)	2.5	2.0	0.8	0.0124	✓			✓	✓	KC2520K (32.768kHz)	0.032768	No	Yes	No	NR	Yes		
	25-26	KC3225K (32.768kHz)	3.2	2.5	0.8	0.0126	✓			✓	✓	KC3225K (32.768kHz)	0.032768	No	Yes	No	NR	Yes		
	25-26	KC5032K (32.768kHz)	5.0	3.2	1.2	0.0271	✓			✓	✓	KC5032K (32.768kHz)	0.032768	No	Yes	No	NR	Yes		
	25-26	KC7050K (32.768kHz)	7.0	5.0	1.2	0.0366	✓			✓	✓	KC7050K (32.768kHz)	0.032768	No	Yes	No	NR	Yes		
	27-29	KC2016K	2.0	1.6	0.8	0.0070	✓			✓	✓	KC2016K	1.5---------- 160	No	Yes	No	NR	Yes		
	27-29	KC2520K	2.5	2.0	0.8	0.0124	✓			✓	✓	KC2520K	1.5---------- 160	No	Yes	No	NR	Yes		
	27-29	KC3225K	3.2	2.5	0.8	0.0126	✓			✓	✓	KC3225K	1.5---------- 160	No	Yes	No	NR	Yes		
	27-29	KC5032K	5.0	3.2	1.2	0.0271	✓			✓	✓	KC5032K	1.5---------- 160	No	Yes	No	NR	Yes		
	27-29	KC7050K	7.0	5.0	1.2	0.0366	✓			✓	✓	KC7050K	1.5---------- 160	No	Yes	No	NR	Yes		
	30-31	MC2016K (32.768kHz)	2.0	1.6	0.8	0.0070		✓				MC2016K (32.768kHz)	0.032768	No	Yes	No	NR	Yes	Yes (option)	Yes
	30-31	MC2520K (32.768kHz)	2.5	2.0	0.8	0.0124		✓				MC2520K (32.768kHz)	0.032768	No	Yes	No	NR	Yes	Yes (option)	Yes
	30-31	MC3225K (32.768kHz)	3.2	2.5	0.8	0.0126		✓				MC3225K (32.768kHz)	0.032768	No	Yes	No	NR	Yes	Yes (option)	Yes
	30-31	MC5032K (32.768kHz)	5.0	3.2	1.2	0.0271		✓				MC5032K (32.768kHz)	0.032768	No	Yes	No	NR	Yes	Yes (option)	Yes
	30-31	MC7050K (32.768kHz)	7.0	5.0	1.2	0.0366		✓				MC7050K (32.768kHz)	0.032768	No	Yes	No	NR	Yes	Yes (option)	Yes
	32-34	MC2016K	2.0	1.6	0.8	0.0070		✓				MC2016K	1.5---------- 160	No	Yes	No	NR	Yes	Yes (option)	Yes
	32-34	MC2520K	2.5	2.0	0.8	0.0124		✓				MC2520K	1.5---------- 160	No	Yes	No	NR	Yes	Yes (option)	Yes
	32-34	MC3225K	3.2	2.5	0.8	0.0126		✓				MC3225K	1.5---------- 160	No	Yes	No	NR	Yes	Yes (option)	Yes
	32-34	MC5032K	5.0	3.2	1.2	0.0271		✓				MC5032K	1.5---------- 160	No	Yes	No	NR	Yes	Yes (option)	Yes
	32-34	MC7050K	7.0	5.0	1.2	0.0366		✓				MC7050K	1.5---------- 160	No	Yes	No	NR	Yes	Yes (option)	Yes
	35-36	KC2016F (LV-PECL Output)	2.0	1.6	1.2	0.0068	✓			✓	✓	KC2016F (LV-PECL Output)	100/125/156.25	No	Yes	No	NR	Yes		
	35-36	KC2520F (LV-PECL Output)	2.5	2.0	1.2	0.0083	✓			✓	✓	KC2520F (LV-PECL Output)	100/125/156.25	No	Yes	No	NR	Yes		
	35-36	KC3225F (LV-PECL Output)	3.2	2.5	1.2	0.0115	✓			✓	✓	KC3225F (LV-PECL Output)	100/125/156.25	No	Yes	No	NR	Yes		
	37-38	KC2016F (LVDS Output)	2.0	1.6	1.2	0.0068				✓	✓	KC2016F (LVDS Output)	100/125/156.25	No	Yes	No	NR	Yes		
	37-38	KC2520F (LVDS Output)	2.5	2.0	1.2	0.0083				✓	✓	KC2520F (LVDS Output)	100/125/156.25	No	Yes	No	NR	Yes		
	37-38	KC3225F (LVDS Output)	3.2	2.5	1.2	0.0115				✓	✓	KC3225F (LVDS Output)	100/125/156.25	No	Yes	No	NR	Yes		
	39-40	KC2016F (HCSL Output)	2.0	1.6	1.2	0.0068				✓	✓	KC2016F (HCSL Output)	100/125/156.25	No	Yes	No	NR	Yes		
	39-40	KC2520F (HCSL Output)	2.5	2.0	1.2	0.0083				✓	✓	KC2520F (HCSL Output)	100/125/156.25	No	Yes	No	NR	Yes		
	39-40	KC3225F (HCSL Output)	3.2	2.5	1.2	0.0115				✓	✓	KC3225F (HCSL Output)	100/125/156.25	No	Yes	No	NR	Yes		
	41-42	MC2016F (LV-PECL Output)	2.0	1.6	1.2	0.0068		✓				MC2016F (LV-PECL Output)	100/125/156.25	No	Yes	No	NR	Yes	Yes (option)	Yes
	41-42	MC2520F (LV-PECL Output)	2.5	2.0	1.2	0.0083		✓				MC2520F (LV-PECL Output)	100/125/156.25	No	Yes	No	NR	Yes	Yes (option)	Yes
	41-42	MC3225F (LV-PECL Output)	3.2	2.5	1.2	0.0115		✓				MC3225F (LV-PECL Output)	100/125/156.25	No	Yes	No	NR	Yes	Yes (option)	Yes
	43-44	MC2016F (LVDS Output)	2.0	1.6	1.2	0.0068		✓				MC2016F (LVDS Output)	100/125/156.25	No	Yes	No	NR	Yes	Yes (option)	Yes
	43-44	MC2520F (LVDS Output)	2.5	2.0	1.2	0.0083		✓				MC2520F (LVDS Output)	100/125/156.25	No	Yes	No	NR	Yes	Yes (option)	Yes
	43-44	MC3225F (LVDS Output)	3.2	2.5	1.2	0.0115		✓				MC3225F (LVDS Output)	100/125/156.25	No	Yes	No	NR	Yes	Yes (option)	Yes
	45-46	MC2016F (HCSL Output)	2.0	1.6	1.2	0.0068		✓				MC2016F (HCSL Output)	100/125/156.25	No	Yes	No	NR	Yes	Yes (option)	Yes
	45-46	MC2520F (HCSL Output)	2.5	2.0	1.2	0.0083		✓				MC2520F (HCSL Output)	100/125/156.25	No	Yes	No	NR	Yes	Yes (option)	Yes
	45-46	MC3225F (HCSL Output)	3.2	2.5	1.2	0.0115		✓				MC3225F (HCSL Output)	100/125/156.25	No	Yes	No	NR	Yes	Yes (option)	Yes
Temperature Compensated Crystal Oscillators (TCXO)	47	KT1612A	1.65	1.25	0.55	0.0040	✓			✓	✓	KT1612A	19.2 ---------- 76.8	No	Yes	No	No	Yes		
	48	KT1612A (Low Voltage Drive)	1.65	1.25	0.55	0.0048				✓		KT1612A (Low Voltage Drive)	26 ---------- 52.0	No	Yes	No	No	Yes		
	49	KT1612A (Low Phase Noise)	1.65	1.25	0.55	0.0048	✓			✓	✓	KT1612A (Low Phase Noise)	19.2 ---------- 76.8	No	Yes	No	No	Yes		
	50	KT2016K	2.0	1.6	0.8	0.0070	✓	✓		✓	✓	KT2016K	19.2 ---------- 52.0	No	Yes	No	No	Yes	Yes (option)	Yes
	51	KT2016K (Low Voltage Drive)	2.0	1.6	0.8	0.0070				✓		KT2016K (Low Voltage Drive)	26 ---------- 52.0	No	Yes	No	No	Yes		Yes
	52	KT2016K (Low Phase Noise)	2.0	1.6	0.8	0.0070	✓	✓		✓	✓	KT2016K (Low Phase Noise)	19.2 ---------- 60.0	No	Yes	No	No	Yes		Yes
	53	KT2520K	2.5	2.0	0.8	0.0080	✓	✓		✓	✓	KT2520K	19.2 ---------- 52.0	No	Yes	No	No	Yes	Yes (option)	Yes

* RoHS Compliant Products : Products which do not contain lead, cadmium, mercury, hexavalent chromium, PBB, PBDE, DEHP, BBP, DBP and DIBP, based on EU DIRECTIVE 2015/863/EU. Substances exempted by the DIRECTIVE and impurities observed in the natural environment are excepted.

As of October 2024