

Application Note 49

Land Patterns for Surface Mount Metric Quad Flat Pack (MQFP) Devices

The use of MQFP packaged devices has increased over the last several years. Along with the increase comes the need for standard package outlines and standard sets of data to simplify the layout task of board designers. Raytheon Electronics Semiconductor Division actively supports all industry standardization efforts and is an active member in many technical associations like Electronics Industries Association (EIA), the Joint Electronic Devices Engineering Council (JEDEC), and the Institute for Interconnecting and Packaging Electronic Circuits (IPC). With that in mind, the Semiconductor Division strives to use JEDEC and IPC

standards to describe the physical properties of all products supplied. This is especially key with the new MQFP packaged devices.

All MQFP packages supplied by Raytheon Electronics Semiconductor Division conform to JEDEC Publication 95, "Registered and Standard Outlines for Solid State and Related Products, Metric Quad Flat Pack Family 3.2 mm Footprint," Outline MO-108, Issue B, dated 1/94. These packages include:

Package Designator	Lead Count	Package Shape	Package Thickness (maximum)	IPC-SM-782 Component Identifier	IPC-SM-782 RLP No.
KB	128-lead	Square	4.07 mm	QFP 28x28-128	619
KE	120-lead	Square	3.92 mm	QFP 28x28-120	618
KH	100-lead	Rectangular	3.40 mm	QFP 14x20-100	711
KL	80-lead	Rectangular	3.40 mm	QFP 14x20-80	710
KM	80-lead	Rectangular	2.35 mm	QFP 14x20-80	710
KP	64-lead	Square	2.45 mm	QFP 14x14-64	590
KA	64-lead	Square	2.45 mm	QFP 10x10-64	
KT	44-lead	Square	2.45 mm	QFP 10x10-44	570

Note: KA package has a 3.9mm footprint instead of a 3.2mm footprint.

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