

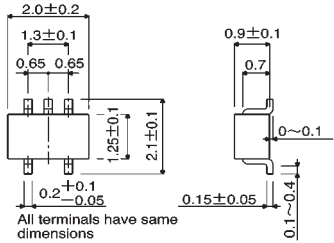
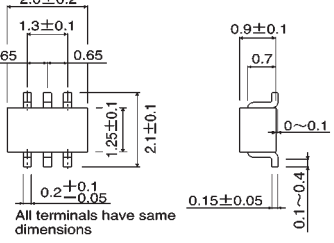
Packages

ROHM has been manufacturing transistors since 1975. In the development of products, we constantly strive to anticipate the needs of our customers. Regarding packages, the demands of the market for compactness, low power consumption, higher power dissipation and automatic mounting support are becoming ever greater, and we are strengthening our product development system to meet these needs.

●Types and features of surface-mount packages

Type	External dimensions (Units : mm)	Features
EMT3 SC-75A type		<p>A more compact version of the UMT3 (SC-70), the EMT3 is the world's smallest transistor with a mold size of 1.6 × 0.8 mm. The mounting area is approximately 60% of the UMT3 and 30% of the SMT3, making it ideal for ultra-high density mounting. Mounting is possible with the same type of automatic mounting machine as the UMT3.</p>
UMT3 SC-70 type	<p>All terminals have same dimensions</p>	<p>The UMT3 is a smaller version of the SMT3 (SC-59). The mounting area is approximately 60% of the SMT3, making it optimum for high density mounting. The taping size is the same as the SMT3, allowing use of conventional automatic mounting machines. Electrical characteristics and reliability are the same as the SMT3.</p>
SMT3 SC-59 type	<p>All terminals have same dimensions</p>	<p>The SMT3 is a compact package suitable for small electronic devices and hybrid IC applications. With proven performance, this is one of the most basic small packages. With the exception of P_c (collector power dissipation), electrical characteristics are similar to leaded packages. Reliability is on the same level as the SPT.</p>
MPT3 SC-62 type		<p>By itself the MPT3 has a P_c of 0.5 W (T_a = 25°C), but when used on a 40 × 40 × 0.7 mm ceramic board, P_c = 2 W (T_c = 25°C), allowing high power to be obtained with a small package. The flat package makes it suitable for applications requiring compactness such as hybrid ICs. Available on tape for automatic mounting.</p>

Type	External dimensions (Units : mm)	Features
CPT 3 SC-63 type	<p>Technical drawing of the CPT 3 SC-63 package. It includes a top view showing a rectangular package with dimensions: width 6.5±0.2, height 5.5±0.3, and lead spacing 2.3±0.2. A detail view shows a lead with a 0.5 lead angle (C0.5), length 2.3±0.2, and thickness 0.5±0.1. Other dimensions include 5.1±0.2, 1.5±0.1, 0.75, 0.9, 0.65±0.1, 0.9, 0.55±0.1, 1.0±0.2, and 9.5±0.5.</p>	<p>By itself the CPT3 has a P_c of 1 W ($T_a = 25^{\circ}\text{C}$), but a large P_c of several watts can be obtained with an appropriate mounting surface. At the same time the CPT3 is compact, making it suitable for high density mounting and hybrid ICs. Available on tape for automatic mounting.</p>
PSD3	<p>Technical drawing of the PSD3 package. It includes a top view showing a rectangular package with dimensions: width 10.1±0.3, height 8.8±0.2, and lead spacing 5.08. A side view shows a height of 4.5±0.2 and a lead thickness of 0.5 mm. Other dimensions include 13.1±0.5, 3.2, 2.54, 0.78, 1.24, 1.3, 0.4, and 1.3.</p>	<p>The PSD3 is a TO-220 class surface-mount package. A high P_c can be obtained with an appropriate mounting surface. Surface mounting allows a high vertical density, enabling the design of slim and compact devices. The PSD3 is available on tape for automatic mounting, and it helps improve mounting efficiency and reduce mounting cost.</p>
SMT5 SC-74A type	<p>Technical drawing of the SMT5 SC-74A package. It includes a top view showing a rectangular package with dimensions: width 2.9±0.2, height 1.9±0.2, and lead spacing 0.95. A side view shows a height of 1.1±0.2 and a lead thickness of 0.3±0.1. Other dimensions include 0.15±0.1, 0.06, 0.3±0.1, 0.05, 1.6±0.2, 0.1, 2.8±0.2, 0.8±0.1, and 0~0.1. A note states: "All terminals have same dimensions".</p>	<p>The SMT5 consists of two connected transistors or digital transistors in an SMT3 (SC-59) package. The mounting area can be reduced by 50% compared to the SMT3 and the internal circuitry is complete, making this package ideal for high density mounting at half the assembly cost.</p>
SMT6 SC-74 type	<p>Technical drawing of the SMT6 SC-74 package. It includes a top view showing a rectangular package with dimensions: width 2.9±0.2, height 1.9±0.2, and lead spacing 0.95. A side view shows a height of 1.1±0.2 and a lead thickness of 0.3±0.1. Other dimensions include 0.15±0.1, 0.06, 0.3±0.1, 0.05, 1.6±0.2, 0.1, 2.8±0.2, 0.8±0.1, and 0~0.1.</p>	<p>The SMT6 consists of two independent transistors or two independent digital transistors in an SMT3 (SC-59) package. The mounting area and mounting cost can be reduced by 50% compared to the SMT3, and the two transistors are independent to allow free configuration of a high density circuit.</p>

Type	External dimensions (Units : mm)	Features
<p>UMT5 SC-88A type</p>	 <p>All terminals have same dimensions</p>	<p>The UMT5 consists of two connected transistors or digital transistors in a UMT3 (SC-70) package. The mounting area can be reduced by 50% compared to the UMT3 and the internal circuitry is completed, making this package ideal for high density mounting at half the assembly cost.</p>
<p>UMT6 SC-88 type</p>	 <p>All terminals have same dimensions</p>	<p>The UMT6 consists of two independent transistors or two independent digital transistors in a UMT3 (SC-70) package. The mounting area and mounting cost can be reduced by 50% compared to the UMT3, and the two transistors are independent to allow free configuration of a high density circuit.</p>

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