

# 60/40 Tin/Lead Solder Wire



### DESCRIPTION

High grade solder wire containing 60% tin and 40% lead. Provides excellent solder joint reliability, superior joint strength and excellent thermal and mechanical fatigue resistance. It has a rosin-activated flux which requires little cleaning after making the solder joint and is ideal for use in applications requiring good activation.

### **DISTINCTIVE FEATURES**

- Excellent solder joint reliability
- Superior joint strength
- Excellent thermal & mechanical fatigue resistance
- Suitable for no-clean process

### **APPLICATIONS**

Please note: This product contains lead and rosin. As of 1st March 2018 the supply of solder containing lead at a concentration above the relevant limit as set out under Article 67 (by virtue of Annex XVII of the REACH regulation) is restricted to professional use only.

We recommend that schools use lead-free solder for all projects.











# **GENERAL SPECIFICATION**

Melting Point	+183 to +190°C approx.		
Gravity	8.5		
Spreadability	>80%		



# **MATERIALS**

Alloy	Sn/Pb40
Appearance	Bright and shiny surface
Flux Content	2.0 ± 1.0%
Halide Content	<1%
Alloy Composition	See below

Sn	Pb	Sb	Bi	Cd	Cu	Au	ln	Ag	Al	As	Fe	Ni	Zn
59.5~ 60.5	REM.	0.05 Max	0.05 Max	0.002 Max	0.05 Max	0.05 Max	0.10 Max	0.10 Max	0.001 Max	0.03 Max	0.02 Max	0.10 Max	0.001 Max



# **CERTIFICATION AND STANDARDS**

Reliability Tests:					
Test item	Test result	Test method			
Copper Mirror Test	Pass	IPC-TM-650, 2.3.32			
Copper plate Corrosion	Pass	IPC-TM-650, 2.6.15			
S.I.R Test	PASS 1×10 <sup>10</sup> Ω up	IPC-TM-650, 2.6.3.3			
Electrochemical migration Test	PASS 1×10 <sup>10</sup> Ω up	IPC-TM-650, 2.6.14.1			



# **ENVIRONMENTAL/OPERATING SPECIFICATION**

	Must be stored in a dry and non-corrosive environment. Avoid contact with acids and hydrogen peroxide.
Shelf life	2 years from date of manufacture



# **DIMENSIONS/DRAWINGS**

Part Number Units	Wire diameter mm	Pack size
85-6860	0.7	100g Reel
85-6861	0.7	500g Reel
85-6862	1.2	500g Reel
85-6863	1.2	2kg Reel





### **PART NUMBER TABLE**

Part Number	EAN	UNSPSC	Country of Origin	
85-6860	<b>85-6860</b> 5053556001934		Taiwan	
85-6861	5053556001941	23271806	Taiwan	
85-6862	5053556001958	23271806	Taiwan	
85-6863	5053556001965	23271806	Taiwan	



Important Notice: This data sheet and its contents (the "Information") belong to Rapid Electronics Limited or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but Rapid Electronics Limited assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where Rapid Electronics Limited were aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict Rapid Electronics Limited's liability for death or personal injury resulting from its negligence.