Tyco Electronics

Type 3130 Series

The ultimate in miniaturised potentiometers the 3130 from Tyco Electronics is one of the smallest and lightest trimmers available. With a weight of just 40mg and a height profile of only 1.55mm, it has been developed specifically for new generation hand held equipment where design specification demands precise setting and exceptional reliability. These tiny trimmers are supplied packaged for auto assembly in 8mm blister tape on 7" reels of 2000 pieces.

Key Features

- **Tiny 3mm Potentiometer**
- **Stable Cermet Element**
- **Light Weight - Only 0.04 Grams**
- **Only 1.55mm Height above Board**
- **Components Marked with Value**
- **Packaged in 2000 Pieces on 8mm Tape**
- **Delta Terminals Prevent Solder Bridging**
- **Top and Underside Adjust Available**

Characteristics - Electrical

Resistance Range:	100R to 1M
Resistance Values:	1, 2 & 5 in each decade
Resistance Tolerance:	± 25%
Resistance Law:	Linear
Temperature Coefficient of Resistance:	± 250ppm/°C (-40°C to +100°C)
Maximum Operating Voltage:	50 V DC
Resolution:	Infinite
Contact Resistance Variation:	5% of Nominal Value
Power Rating:	0.15W @ 70°C
Electrical Rotation:	260° ±20°

Characteristics - Mechanical

Rotation Torque:	20 - 200 gfcm
Mechanical Rotation:	Continuous
Marking:	2 Digit Resistance Code on Potentionmeter. Date Code on Reels

Characteristics - Environmental

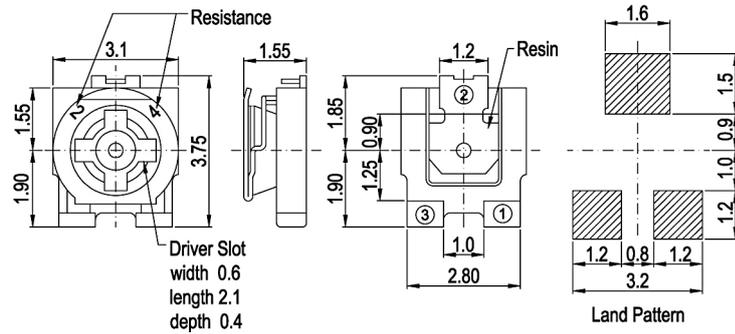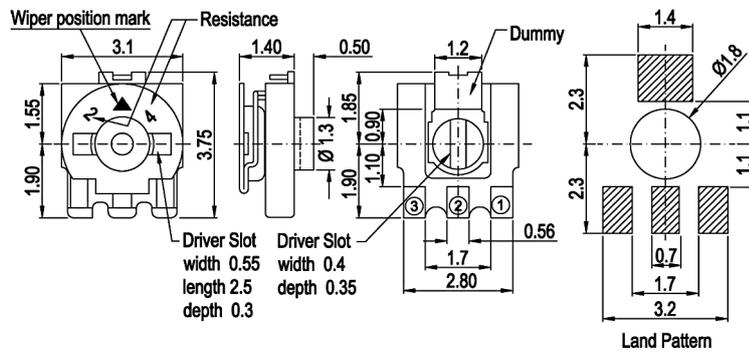|	
Temperature Range:	-40°C to +100°C
Rotational Life:	20 Cycles ΔR ±15%
Load Life:	ΔR < 5% after 500 Hours @ 70°C
Humidity Load Life:	ΔR ± 5% 500 Hours at 95% RH under load
High Temperature:	ΔR ± 5% 500 Hours at 70°C

Derating Curve
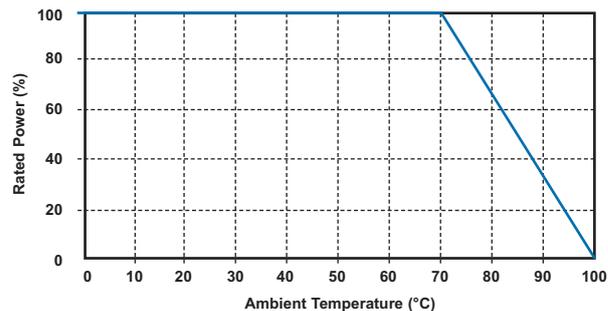
When the ambient temperature exceeds 70°C, reduce the rated power and current in accordance with the derating curve given

Dimensions

3130

Resistance
3.1
1.55
1.55
1.90
3.75
Driver Slot
width 0.6
length 2.1
depth 0.4

1.55

1.2 — Resin
1.85
0.90
1.25
1.90
2.80
1.0

1.6
1.5
0.9
1.0
1.2
1.2   0.8   1.2
3.2
Land Pattern

3132

Wiper position mark — Resistance
3.1
1.55
1.90
3.75
Driver Slot
width 0.55
length 2.5
depth 0.3

1.40
Ø 1.3

0.50
1.2 — Dummy
1.85
0.90
1.10
1.90
2.80
1.7
0.56
Driver Slot
width 0.4
depth 0.35

1.4
Ø1.8
2.3
1.1
1.1
1.1
2.3
0.7
1.7
3.2
Land Pattern

How to Order

3130	X	102	P
Common Part	**Orientation**	**Resistance Value**	**Tolerance**
3130 - Top Adjust 3132 - Underside Adjust	X - Terminals 1 & 3 away from the sprocket holes	The first two digits are signifigant figures of resistance value and the third denotes the number of zeros following. e.g. 100R: 101 1K: 102 10K: 103 100K: 104	P - 25 %