

MODEL 83

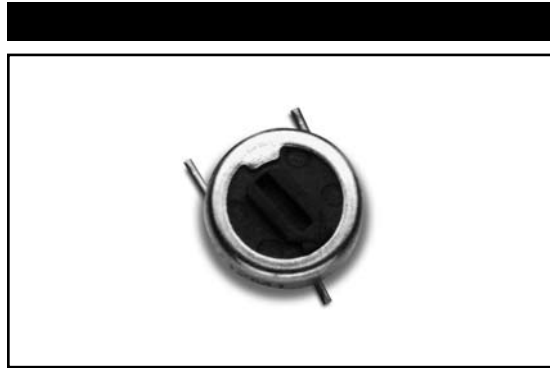
1/4" Single Turn

Surface Mount

Cermet Trimming

Potentiometer

1



ELECTRICAL

Standard Resistance Range, Ohms	10 to 1Meg
Standard Resistance Tolerance	$\pm 10\%$ (<100 Ohms = $\pm 20\%$)
Input Voltage, Maximum	200 Vdc or rms not to exceed power rating
Slider Current, Maximum	100mA or within rated power, whichever is less
Power Rating, Watts	0.5 at 70°C derating to 0 at 150°C
End Resistance, Maximum	2 Ohms
Actual Electrical Travel, Nominal	220°
Dielectric Strength	400 Vrms
Insulation Resistance, Minimum	100 Megohms
Resolution	Essentially infinite
Contact Resistance Variation, Maximum	1% or 1 Ohms, whichever is greater

ENVIRONMENTAL

Seal	85°C Fluorinert® (No Leaks)
Temperature Coefficient, Maximum	$\pm 100\text{ppm}/^\circ\text{C}$
Operating Temperature Range	-55°C to +125°C
Thermal Shock	5 cycles, - 55°C to +125°C (1% Δ RT, 1% Δ VR)
Moisture Resistance	Ten 24 hour cycles (1% Δ RT, IR 1,000 Megohms Min.)
Shock, 6ms Sawtooth	100G's (1% Δ RT, 1% Δ VR)
Vibration	20G's, 10 to 2,000 Hz (1% Δ RT, 1% Δ VR)
High Temperature Exposure	250 hours at 125°C (2% Δ RT, 2% Δ VR)
Rotational Life	200 cycles (3% Δ RT)
Load Life at 0.5 Watts	1,000 hours at 70°C (2% Δ RT)
Resistance to Solder Heat	350°C for 3 sec. (1% Δ RT) 260°C for 10 sec. (1% Δ RT) 215°C for 120 sec. (1% Δ RT)

MECHANICAL

Mechanical Stops	Solid
Torque, Starting Maximum	3 oz.-in. (0.021 N-m)
Weight, Nominal	.03 oz. (0.85 grams)

Fluorinert® is a registered trademark of 3M Company.
Specifications subject to change without notice.

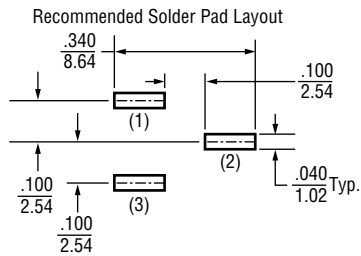
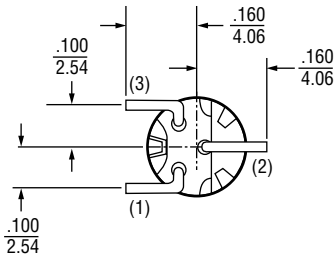
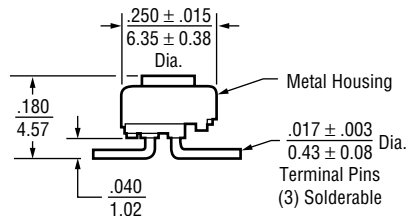
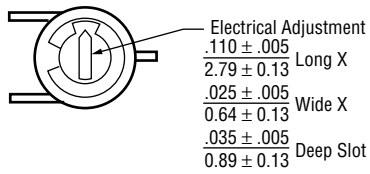


1-69

Model 83

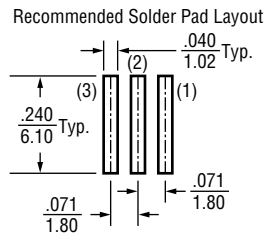
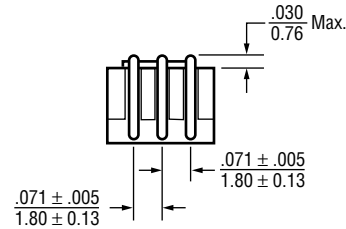
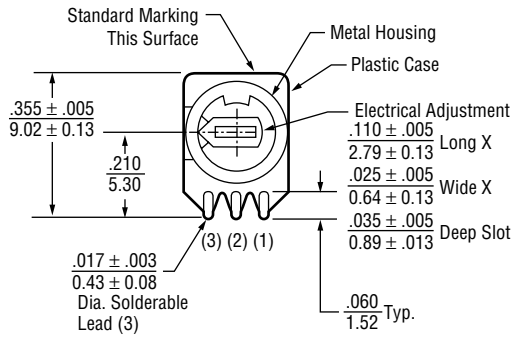
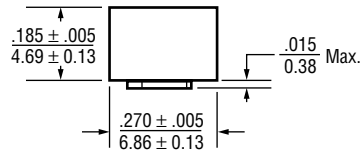
TOP ADJUSTMENT (Inch/mm)

Model 83P



SIDE ADJUSTMENT (Inch/mm)

Model 83Y



STANDARD RESISTANCE VALUES, OHMS

10	100	1K	10K	50K	250K
20	200	2K	20K	100K	500K
50	500	5K	25K	200K	1Meg

PACKAGING

1

Standard: Boxes

Capacity = 100 Units

Option: Tubes (83Y only)

All units oriented with #1 pin to same side.

Magazine:	Width	=	0.30"
	Height	=	0.35"
	Length	=	19.1"
	Capacity	=	50 Units

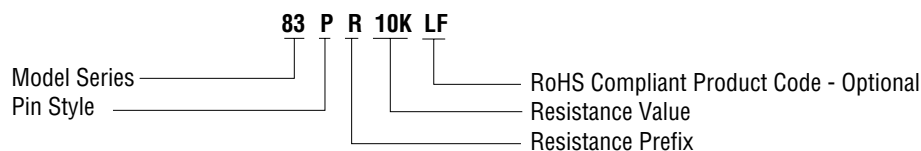
Option: Embossed Tape & Reel (83P only)

All units oriented with #1 pin to the right of the direction of feed.

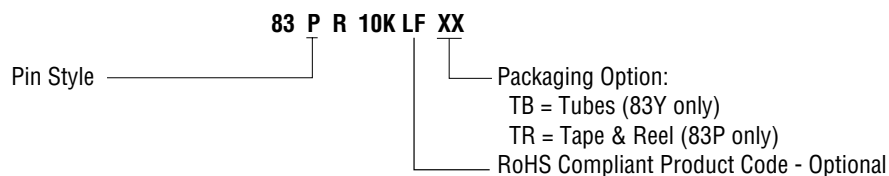
Tape:	Width	=	16 mm
	Sprocket	=	4 mm pitch
	Capacity	=	1,000 Units
Reel:	Diameter	=	14" (356 mm)

ORDERING INFORMATION

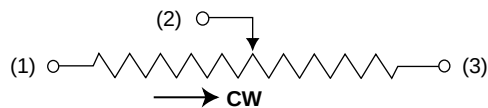
Standard:



Options:



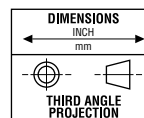
CIRCUIT DIAGRAM



NOTES

Metric equivalents, based on 1 inch = 25.4mm are rounded to the same number of significant figures as in the original English units and are provided for general information only.

Tolerances unless otherwise specified:
Linear = $\pm .01$ inches (.25mm)
Angular = ± 2 degrees



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TT Electronics:

[83PR1KLF](#) [83YR200LFTB](#) [83YR50LFTB](#) [83PR500KLF](#) [83YR1MEGLF](#) [83YR500LF](#) [83PR100KLF](#) [83PR2KLFTB](#)
[83YR500LFTB](#) [83PR25KLF](#) [83YR50KLF](#) [83YR1KLF](#) [83YR100KLF](#) [83YR10KLF](#) [83PR250KLF](#) [83YR500KLFTB](#)
[83YR100KLFTB](#) [83PR200KLFTB](#) [83PR50KLF](#) [83PR100LF](#) [83PR20LF](#) [83YR10LF](#) [83YR250KLF](#) [83PR100LFTR](#)
[83YR200KLFTB](#) [83YR200LF](#) [83PR10KLF](#) [83YR500KLF](#) [83PR200KLF](#) [83PR10KLFTB](#) [83YR20LFTB](#) [83YR10LFTB](#)
[83PR100KLFTB](#) [83PR1MEGLFTB](#) [83YR100LFTB](#) [83YR2KLFTB](#) [83PR25KLFTB](#) [83YR2KLF](#) [83PR20KLF](#)
[83PR200LFTR](#) [83YR20KLFTB](#) [83YR5KLFTB](#) [83PR50LF](#) [83YR1MEGLFTB](#) [83YR5KLF](#) [83PR5KLFTB](#)
[83PR20KLFTB](#) [83PR250KLFTB](#) [83YR50LF](#) [83YR20KLF](#) [83YR200KLF](#) [83PR500KLFTB](#) [83PR50KLFTB](#)
[83YR250KLFTB](#) [83PR1MEGLF](#) [83PR200LF](#) [83YR100LF](#) [83YR20LF](#) [83PR10LFTR](#) [83PR2KLF](#) [83YR50KLFTB](#)
[83PR10LF](#) [83YR25KLF](#) [83YR25KLFTB](#) [83PR1KLFTB](#) [83PR5KLF](#) [83YR1KLFTB](#) [83PR500LFTR](#)