

# DATA SHEET

## LEADED POWER RESISTORS

LPS – SEMICUSTOMIZED current sensors

BUILD YOUR OWN



Product Specification – Jun. 18, 2003 V.0



Low Ohmic Power resistors  
Current sensor

Specification

Type		LPS359-XXX
Style		Existing styles upon request
Power rating $P_{70}$	W	depends on style
Resistance range	$\Omega$	0R0005 ... 0R068
Tolerance	%	$\pm 5$ others upon request
Temperature coefficient	$10^{-6} * K^{-1}$	-80 ... +40 for CuNi 44 others upon request
max. cont. working voltage	$V_{RMS}$	$\sqrt{P_{70} \cdot R}$
Insulation voltage (1min.)	$V_{RMS}$	not insulated
Insulation resistance	$\Omega$	not insulated
Derating linear	$^{\circ}C$	70 ... 350 (0W)
Climatic category		55/350/56
Temperature range	$^{\circ}C$	-55 ... 350
Thermal resistance		$280^{\circ}C/P_{70}$
Failure rate (Total, $\vartheta_0$ max., 60% conf. lev.)	$10^{-9} * h^{-1}$	< 0,1
Endurance ( $P_{70}$ , @ 70 $^{\circ}C$ , 1000h, interm.)	$\left[ \frac{\Delta R}{R} \right]$ %	< 0,3
Damp heat, steady state (40 $^{\circ}C$ , 93% r.h., 56d)	$\left[ \frac{\Delta R}{R} \right]$ %	$\pm 0,5$
Climatic sequence	$\left[ \frac{\Delta R}{R} \right]$ %	$\pm 0,5$

# Series LPS

## Low Ohmic Power resistors Current sensor

Terminal strength	$\left[ \frac{\Delta R}{R} \right] \%$	n.a.
Terminal tensile strength	N	n.a
Resistance to soldering heat (260°C, 10s)	$\left[ \frac{\Delta R}{R} \right] \%$	0,2% typ.
Solderability		suitable for wave-soldering
Marking		value imprinted

Construction: These components are made directly from resistive alloys. Standard are CuNi 44 and CuNi 23 Mn, others upon request.

Packaging:

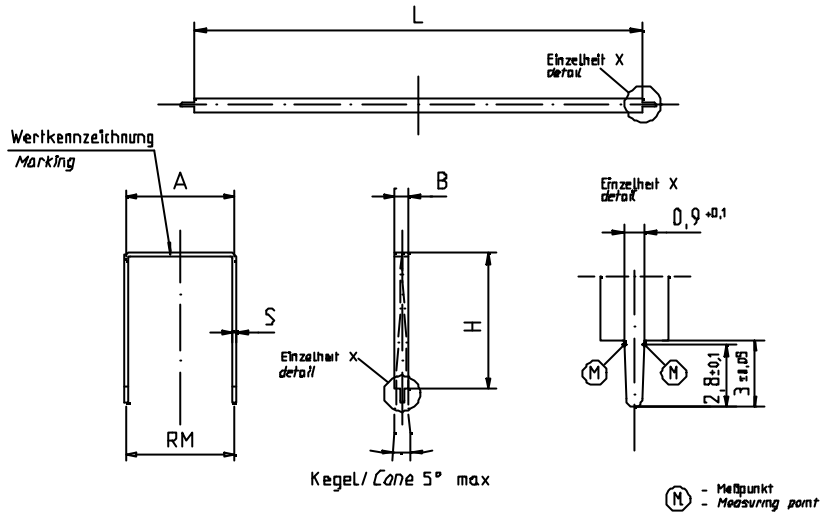
Packaging	Pieces
bulk	depends on size Code

Special packaging: sealed in nitrogen to avoid corrosion.

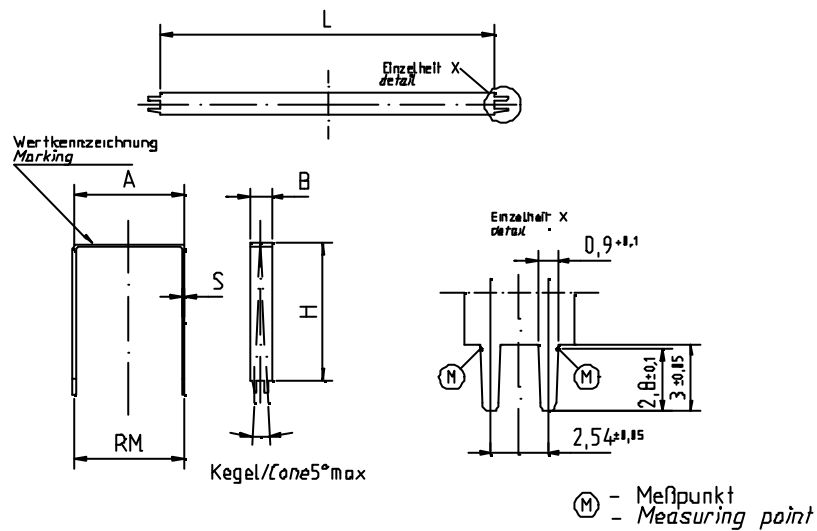
# Series LPS

## Low Ohmic Power resistors Current sensor

Dimensions in mm:



### LPS359-0xx



### LPS359-1xx

RM: available from 5 to 25mm, preferably in 5mm-steps.

A, B and S depend on material, resistance value and required power rating.

Ordering example:	LPS 359-Xxx	3	B	R003
	Type	Tolerance	Packing-Code	R-Value