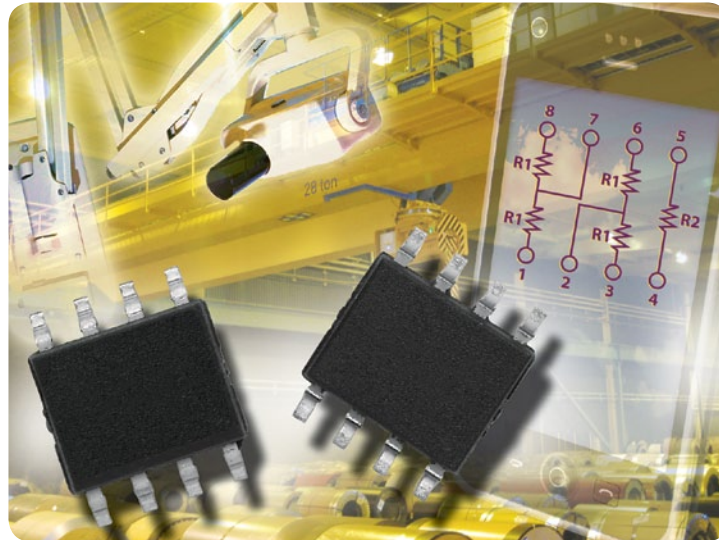


Molded, 50 mil Pitch, Dual-In-Line Resistor, Surface-Mount Network



KEY BENEFITS

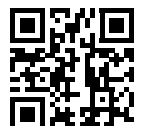
- Close ratio tolerance (0.05 %)
- Tight TCR tracking (± 5 ppm/ $^{\circ}$ C)
- Ratio stability characteristics ($\Delta R \pm 0.015$ %) at 2000 h at + 70 $^{\circ}$ C
- Rugged molded case construction with no internal solder
- Wide resistance range available: 2 k Ω to 50 k Ω
- Integrated construction

APPLICATIONS

- Telecommunications
- Industrial applications
- Process control
- Medical instrumentation

RESOURCES

- Datasheet: ORNV (Divider) - <http://www.vishay.com/doc?60112>
- For technical questions contact thinfilm@vishay.com

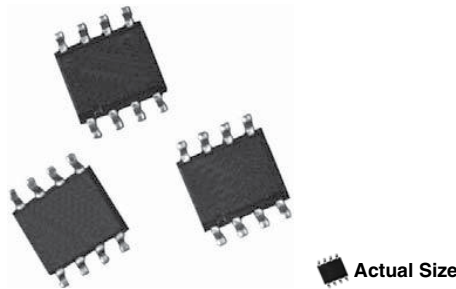


THIN FILM RESISTORS

ORNV (Divider)

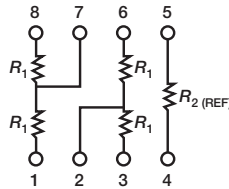


Molded, 50 mil Pitch, Dual-In-Line Resistor, Surface-Mount Network



Vishay Dale Thin Film ORNV series voltage dividers provide optimum ratio precision, small size and exceptional stability for most applications. They offer a wide ratio range that is listed in the selection guide and are available for immediate delivery. The tight ratio tolerance offered on the standard ratios will provide exceptional performance throughout life.

SCHEMATIC



FEATURES

- Close ratio tolerance (0.05 %)
- Tight TCR tracking ± 5 ppm/ $^{\circ}$ C
- 0.068" (1.73 mm) maximum seated height
- Rugged molded case construction with no internal solder (JEDEC MS-012 variation AA package)
- Compliant to RoHS Directive 2002/95/EC
- Halogen-free according to IEC 61249-2-21 definition



RoHS*
COMPLIANT
HALOGEN
FREE

Note

* Pb containing terminations are not RoHS compliant, exemptions may apply

TYPICAL PERFORMANCE

	ABSOLUTE	TRACKING
TCR	25	5
	ABSOLUTE	RATIO
TOL.	0.1	0.05

STANDARD RESISTANCE OFFERING

R_1 (Ω) (4 Voltage Divider Resistors)	R_2 (Ω) (Reference)
2K	2K
	5K
	10K
	5K
5K, 10K, 20K, 25K, 50K	10K
	20K
	25K
	50K

Note

- Consult factory for additional values and schematics

STANDARD ELECTRICAL SPECIFICATIONS

TEST	SPECIFICATIONS	CONDITIONS
Material	Passivated nichrome	-
Pin/Lead Number	8	-
Resistance Range	2 k Ω to 50 k Ω	-
TCR: Absolute	± 25 ppm/ $^{\circ}$ C	-55 $^{\circ}$ C to +125 $^{\circ}$ C
TCR: Tracking	± 5 ppm/ $^{\circ}$ C	-55 $^{\circ}$ C to +125 $^{\circ}$ C
Tolerance: Absolute	± 0.1 %	+25 $^{\circ}$ C
Tolerance: Ratio	± 0.05 %	+25 $^{\circ}$ C
Power Rating: Resistor	100 mW	Maximum at +70 $^{\circ}$ C
Power Rating: Package	400 mW	Maximum at +70 $^{\circ}$ C
Stability: Absolute	$\Delta R \pm 0.05$ %	2000 h at +70 $^{\circ}$ C
Stability: Ratio	$\Delta R \pm 0.015$ %	2000 h at +70 $^{\circ}$ C
Voltage Coefficient	< 0.1 ppm/V	-
Working Voltage	100 V max. not to exceed $\sqrt{P \times R}$	-
Operating Temperature Range	-55 $^{\circ}$ C to +125 $^{\circ}$ C	-
Storage Temperature Range	-55 $^{\circ}$ C to +150 $^{\circ}$ C	-
Noise	< -30 dB	-
Thermal EMF	0.08 μ V/ $^{\circ}$ C	-
Shelf Life Stability: Absolute	$\Delta R \pm 0.01$ %	1 year at +25 $^{\circ}$ C
Shelf Life Stability: Ratio	$\Delta R \pm 0.002$ %	1 year at +25 $^{\circ}$ C

Revision 01-Sep-11