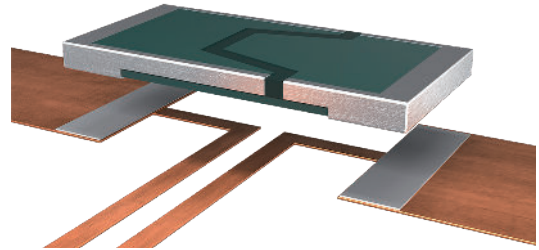




## 25005/VMP (2010)

### ISA-PLAN® PRECISION RESISTOR



#### FEATURES

- Constant current up to 17 A (5 mOhm)
- 1.5 W power rating at 70 °C
- Two-terminal configuration
- Excellent temperature behavior
- Excellent heat dissipation
- High application temperature range -65 to +170 °C
- SnPb plated terminals

#### APPLICATIONS

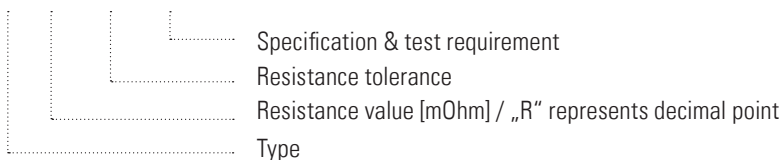
- Industrial Grade / Engineering Models (Test Code A)
- Military Grade (Test Code B)
- Space Level (Test Code T)

#### Technical data

Resistance values	<b>mOhm</b>	5 to 1000		
Tolerance	<b>%</b>	0.5 / 1		
Temperature coefficient	<b>ppm/K</b>	-55°C to +25°C	+25°C to +125°C	-55°C to +125°C
		±60	±35	±50
Applicable temperature range	<b>°C</b>	-65 to +170		
Power rating <b>P<sub>70°C</sub></b>	<b>W</b>	1.5		
Stability (at rated power) deviation after 1000h, $T_K$ = Terminal temperature	<b>%</b>	< 0.5 ( $T_K=70^\circ\text{C}$ )		

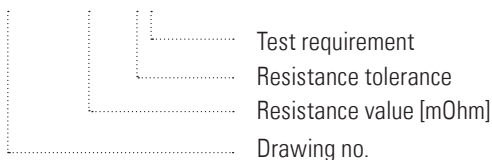
#### Ordering code Isabellenhütte

VMP - R100 - 0.5 - MT



#### DLA Part or Identifying Number (PIN)

25005 - \*\*\*\*\* DT



**Recommended solder profile**

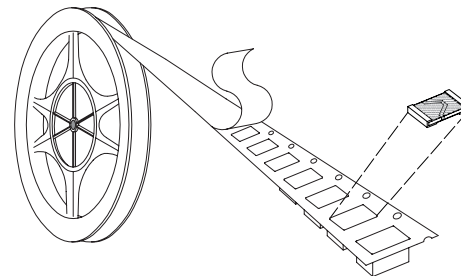
Reflow-, IR-soldering				
Temperature	°C	260	255	217
Time	sec	peak	40	90

**Tape and reel information**

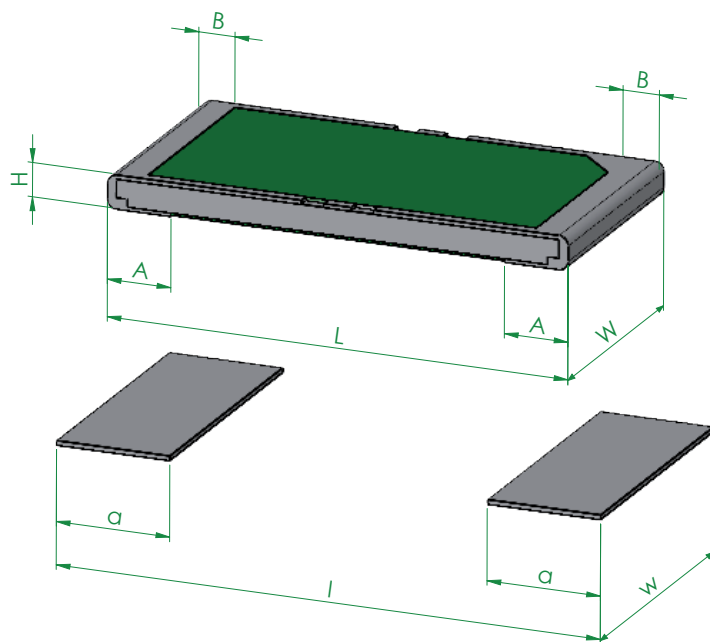
Specification	DIN EN 60286-3			
Tape width	mm	12		
Reel size	inch	13		

**Form of delivery**

Cut tape	pcs	up to 500		
Tape and reel	pcs	>500		



**Mechanical dimensions and pcb-layout proposal (reflow-soldering) [mm]**



Type	L	W	H	A	B
VMP-Mx	5.08 ± 0.2	2.54 ± 0.2	0.4 ± 0.15	0.7 ± 0.2	0.4 ± 0.15

Solder pad type	l	w	a
VMP-Mx	6	3	1.25

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## Available standard resistance values and tolerances\*

Version	DLA drawing no.	Test code	Test requirements acc. to MIL-PRF 32773
Industrial Grade	25005	A	Group A inspection (M Level)
Military Grade		B	Group A & Group B inspection (T Level)
Space Level		T	Group A & Group B inspection (T Level) + Life Test (1000 hrs) acc. to para 4.5 of the DLA drawing

Ordering code	PIN	Ordering code	PIN
VMP-R005-0.5-MA	25005-OR005DA	VMP-R022-0.5-MT	25005-OR022DT
VMP-R005-0.5-MB	25005-OR005DB	VMP-R022-1.0-MA	25005-OR022FA
VMP-R005-0.5-MT	25005-OR005DT	VMP-R022-1.0-MB	25005-OR022FB
VMP-R005-1.0-MA	25005-OR005FA	VMP-R022-1.0-MT	25005-OR022FT
VMP-R005-1.0-MB	25005-OR005FB	VMP-R025-0.5-MA	25005-OR025DA
VMP-R005-1.0-MT	25005-OR005FT	VMP-R025-0.5-MB	25005-OR025DB
VMP-R0068-0.5-MA	25005-R0068DA	VMP-R025-0.5-MT	25005-OR025DT
VMP-R0068-0.5-MB	25005-R0068DB	VMP-R025-1.0-MA	25005-OR025FA
VMP-R0068-0.5-MT	25005-R0068DT	VMP-R025-1.0-MB	25005-OR025FB
VMP-R0068-1.0-MA	25005-R0068FA	VMP-R025-1.0-MT	25005-OR025FT
VMP-R0068-1.0-MB	25005-R0068FB	VMP-R033-0.5-MA	25005-OR033DA
VMP-R0068-1.0-MT	25005-R0068FT	VMP-R033-0.5-MB	25005-OR033DB
VMP-R008-0.5-MA	25005-OR010DA	VMP-R033-0.5-MT	25005-OR033DT
VMP-R008-0.5-MB	25005-OR010DB	VMP-R033-1.0-MA	25005-OR033FA
VMP-R008-0.5-MT	25005-OR010DT	VMP-R033-1.0-MB	25005-OR033FB
VMP-R008-1.0-MA	25005-OR010FA	VMP-R033-1.0-MT	25005-OR033FT
VMP-R008-1.0-MB	25005-OR010FB	VMP-R039-0.5-MA	25005-OR039DA
VMP-R008-1.0-MT	25005-OR010FT	VMP-R039-0.5-MB	25005-OR039DB
VMP-R010-0.5-MA	25005-OR010DA	VMP-R039-0.5-MT	25005-OR039DT
VMP-R010-0.5-MB	25005-OR010DB	VMP-R039-1.0-MA	25005-OR039FA
VMP-R010-0.5-MT	25005-OR010DT	VMP-R039-1.0-MB	25005-OR039FB
VMP-R010-1.0-MA	25005-OR010FA	VMP-R039-1.0-MT	25005-OR039FT
VMP-R010-1.0-MB	25005-OR010FB	VMP-R050-0.5-MA	25005-OR050DA
VMP-R010-1.0-MT	25005-OR010FT	VMP-R050-0.5-MB	25005-OR050DB
VMP-R015-0.5-MA	25005-OR015DA	VMP-R050-0.5-MT	25005-OR050DT
VMP-R015-0.5-MB	25005-OR015DB	VMP-R050-1.0-MA	25005-OR050FA
VMP-R015-0.5-MT	25005-OR015DT	VMP-R050-1.0-MB	25005-OR050FB
VMP-R015-1.0-MA	25005-OR015FA	VMP-R050-1.0-MT	25005-OR050FT
VMP-R015-1.0-MB	25005-OR015FB	VMP-R068-0.5-MA	25005-OR056DA
VMP-R015-1.0-MT	25005-OR015FT	VMP-R058-0.5-MB	25005-OR056DB
VMP-R020-0.5-MA	25005-OR020DA	VMP-R068-0.5-MT	25005-OR056DT
VMP-R020-0.5-MB	25005-OR020DB	VMP-R068-1.0-MA	25005-OR056FA
VMP-R020-0.5-MT	25005-OR020DT	VMP-R068-1.0-MB	25005-OR056FB
VMP-R020-1.0-MA	25005-OR020FA	VMP-R068-1.0-MT	25005-OR056FT
VMP-R020-1.0-MB	25005-OR020FB	VMP-R100-0.5-MA	25005-OR100DA
VMP-R020-1.0-MT	25005-OR020FT	VMP-R100-0.5-MB	25005-OR100DB
VMP-R022-0.5-MA	25005-OR022DA	VMP-R100-0.5-MT	25005-OR100DT
VMP-R022-0.5-MB	25005-OR022DB	VMP-R100-1.0-MA	25005-OR100FA

Ordering code	PIN	Ordering code	PIN
VMP-R100-1.0-MB	25005-OR100FB	VMP-R300-0.5-MA	25005-OR300DA
VMP-R100-1.0-MT	25005-OR100FT	VMP-R300-0.5-MB	25005-OR300DB
VMP-R120-0.5-MA	25005-OR120DA	VMP-R300-0.5-MT	25005-OR300DT
VMP-R120-0.5-MB	25005-OR120DB	VMP-R300-1.0-MA	25005-OR300FA
VMP-R120-0.5-MT	25005-OR120DT	VMP-R300-1.0-MB	25005-OR300FB
VMP-R120-1.0-MA	25005-OR120FA	VMP-R300-1.0-MT	25005-OR300FT
VMP-R120-1.0-MB	25005-OR120FB	VMP-R390-0.5-MA	25005-OR390DA
VMP-R120-1.0-MT	25005-OR120FT	VMP-R390-0.5-MB	25005-OR390DB
VMP-R150-0.5-MA	25005-OR150DA	VMP-R390-0.5-MT	25005-OR390DT
VMP-R150-0.5-MB	25005-OR150DB	VMP-R390-1.0-MA	25005-OR390FA
VMP-R150-0.5-MT	25005-OR150DT	VMP-R390-1.0-MB	25005-OR390FB
VMP-R150-1.0-MA	25005-OR150FA	VMP-R390-1.0-MT	25005-OR390FT
VMP-R150-1.0-MB	25005-OR150FB	VMP-R470-0.5-MA	25005-OR470DA
VMP-R150-1.0-MT	25005-OR150FT	VMP-R470-0.5-MB	25005-OR470DB
VMP-R160-0.5-MA	25005-OR160DA	VMP-R470-0.5-MT	25005-OR470DT
VMP-R160-0.5-MB	25005-OR160DB	VMP-R470-1.0-MA	25005-OR470FA
VMP-R160-0.5-MT	25005-OR160DT	VMP-R470-1.0-MB	25005-OR470FB
VMP-R160-1.0-MA	25005-OR160FA	VMP-R470-1.0-MT	25005-OR470FT
VMP-R160-1.0-MB	25005-OR160FB	VMP-R500-0.5-MA	25005-OR500DA
VMP-R160-1.0-MT	25005-OR160FT	VMP-R500-0.5-MB	25005-OR500DB
VMP-R180-0.5-MA	25005-OR180DA	VMP-R500-0.5-MT	25005-OR500DT
VMP-R180-0.5-MB	25005-OR180DB	VMP-R500-1.0-MA	25005-OR500FA
VMP-R180-0.5-MT	25005-OR180DT	VMP-R500-1.0-MB	25005-OR500FB
VMP-R180-1.0-MA	25005-OR180FA	VMP-R500-1.0-MT	25005-OR500FT
VMP-R180-1.0-MB	25005-OR180FB	VMP-R560-0.5-MA	25005-OR560DA
VMP-R180-1.0-MT	25005-OR180FT	VMP-R560-0.5-MB	25005-OR560DB
VMP-R200-0.5-MA	25005-OR200DA	VMP-R560-0.5-MT	25005-OR560DT
VMP-R200-0.5-MB	25005-OR200DB	VMP-R560-1.0-MA	25005-OR560FA
VMP-R200-0.5-MT	25005-OR200DT	VMP-R560-1.0-MB	25005-OR560FB
VMP-R200-1.0-MA	25005-OR200FA	VMP-R560-1.0-MT	25005-OR560FT
VMP-R200-1.0-MB	25005-OR200FB	VMP-R820-0.5-MA	25005-OR820DA
VMP-R200-1.0-MT	25005-OR200FT	VMP-R820-0.5-MB	25005-OR820DB
VMP-R250-0.5-MA	25005-OR220DA	VMP-R820-0.5-MT	25005-OR820DT
VMP-R250-0.5-MB	25005-OR220DB	VMP-R820-1.0-MA	25005-OR820FA
VMP-R250-0.5-MT	25005-OR220DT	VMP-R820-1.0-MB	25005-OR820FB
VMP-R250-1.0-MA	25005-OR220FA	VMP-R820-1.0-MT	25005-OR820FT
VMP-R250-1.0-MB	25005-OR220FB	VMP-1R00-0.5-MA	25005-1R000DA
VMP-R250-1.0-MT	25005-OR220FT	VMP-1R00-0.5-MB	25005-1R000DB
VMP-R270-0.5-MA	25005-OR270DA	VMP-1R00-0.5-MT	25005-1R000DT
VMP-R270-0.5-MB	25005-OR270DB	VMP-1R00-1.0-MA	25005-1R000FA
VMP-R270-0.5-MT	25005-OR270DT	VMP-1R00-1.0-MB	25005-1R000FB
VMP-R270-1.0-MA	25005-OR270FA	VMP-1R00-1.0-MT	25005-1R000FT
VMP-R270-1.0-MB	25005-OR270FB		
VMP-R270-1.0-MT	25005-OR270FT		

\* Further values on request

