



### **VRE102MA Information**

Heisener.com

Part Number VRE102MA

Manufacturer Apex Microtechnology

Category Integrated Circuits (ICs)
PMIC - Voltage Reference

**Description** IC VREF SERIES +-10V 14CDIP

**Package** 14-CDIP (0.300", 7.62mm)

For the pricing/inventory/lead time, please contact

us

For Reference Only

Website: https://www.heisener.com
E-mail: salesdept@heisener.com





Heisener's commitment to quality has shaped our processes for sourcing, testing, shipping, and every step in between. This foundation underlies each component we sell.









# **VRE102MA Specifications**

Manufacturer Part Number         VRE102MA           Manufacturer         Apex Microtechnology           Category         Integrated Circuits (ICs)           PMIC - Voltage Reference           Package         14-CDIP (0.300", 7.62mm)           Series         -           Reference Type         Series           Output Type         Fixed           Voltage - Output (Min/Fixed)         ±10V           Voltage - Output (Max)         -           Current - Output         10mA           Tolerance         ±0.02%           Temperature Coefficient         1ppm/°C Typical           Noise - 0.1Hz to 10Hz         6μVp-p           Noise - 0.1Hz to 10kHz         -           Voltage - Input         13.5 V ~ 22 V           Current - Supply         6mA           Current - Cathode         -           Operating Temperature         -55°C ~ 125°C (TA)           Mounting Type         Through Hole           Package / Case         14-CDIP (0.300", 7.62mm)           Supplier Device Package         14-CDIP		***************************************
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Reference TypeSeriesOutput TypeFixedVoltage - Output (Min/Fixed)±10VVoltage - Output (Max)-Current - Output10mATolerance±0.02%Temperature Coefficient1ppm/°C TypicalNoise - 0.1Hz to 10Hz6μVp-pNoise - 10Hz to 10kHz-Voltage - Input13.5 V ~ 22 VCurrent - Supply6mACurrent - Cathode-Operating Temperature-55°C ~ 125°C (TA)Mounting TypeThrough HolePackage / Case14-CDIP (0.300", 7.62mm)Supplier Device Package14-CDIP	Package	14-CDIP (0.300", 7.62mm)
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Voltage - Output (Max)  Current - Output  10mA  Tolerance  ±0.02%  Temperature Coefficient  1ppm/°C Typical  6μVp-p  Noise - 0.1Hz to 10Hz  Voltage - Input  13.5 V ~ 22 V  Current - Supply  6mA  Current - Cathode  Operating Temperature  Operating Type  Through Hole  Package / Case  14-CDIP  10mA	Output Type	Fixed
Current - Output $10\text{mA}$ Tolerance $\pm 0.02\%$ Temperature Coefficient $1\text{ppm}/^{\circ}\text{C Typical}$ Noise - $0.1\text{Hz}$ to $10\text{Hz}$ $6\mu\text{Vp-p}$ Noise - $10\text{Hz}$ to $10\text{kHz}$ - $13.5\text{ V} \sim 22\text{ V}$ Current - Supply $6\text{mA}$ Current - Cathode - $0.0\text{Current}$ - $0.0Current$	Voltage - Output (Min/Fixed)	±10V
Tolerance $\pm 0.02\%$ Temperature Coefficient $1ppm/^{\circ}C$ Typical  Noise - 0.1Hz to 10Hz $6\mu Vp-p$ Noise - 10Hz to 10kHz  Voltage - Input $13.5 \text{ V} \sim 22 \text{ V}$ Current - Supply $6mA$ Current - Cathode  Operating Temperature $-55^{\circ}C \sim 125^{\circ}C$ (TA)  Mounting Type Through Hole  Package / Case $14\text{-}CDIP$ (0.300", 7.62mm)  Supplier Device Package $14\text{-}CDIP$	Voltage - Output (Max)	-
Temperature Coefficient 1ppm/°C Typical $6\mu Vp-p$ $6\mu Vp-p$ Noise - 10Hz to 10kHz Voltage - Input 13.5 V ~ 22 V Current - Supply 6mA Current - Cathode Operating Temperature -55°C ~ 125°C (TA) Mounting Type Through Hole Package / Case 14-CDIP (0.300", 7.62mm) Supplier Device Package 14-CDIP	Current - Output	10mA
Noise - 0.1Hz to 10Hz $ 6\mu Vp-p \\ Noise - 10Hz to 10kHz \\ Voltage - Input \\ Current - Supply  6mA \\ Current - Cathode \\ Operating Temperature \\ Operating Type \\ Mounting Type \\ Through Hole \\ Package / Case \\ Supplier Device Package \\ 14-CDIP \\ 13.5 V ~ 22 V \\ 6mA \\ - \\ - 55^{\circ}C ~ 125^{\circ}C (TA) \\ Through Hole \\ 14-CDIP (0.300'', 7.62mm) \\ 14-CDIP \\ - 14-CDIP \\ $	Tolerance	±0.02%
Noise - 10Hz to 10kHz  Voltage - Input  13.5 V ~ 22 V  Current - Supply  6mA  Current - Cathode  - Operating Temperature  7-55°C ~ 125°C (TA)  Mounting Type  Through Hole  Package / Case  14-CDIP (0.300", 7.62mm)  Supplier Device Package	Temperature Coefficient	1ppm/°C Typical
Voltage - Input  Current - Supply  6mA  Current - Cathode  Operating Temperature  -55°C ~ 125°C (TA)  Mounting Type  Through Hole  Package / Case  14-CDIP (0.300", 7.62mm)  Supplier Device Package	Noise - 0.1Hz to 10Hz	бμVp-p
Current - Supply 6mA  Current - Cathode -  Operating Temperature -55°C ~ 125°C (TA)  Mounting Type Through Hole  Package / Case 14-CDIP (0.300", 7.62mm)  Supplier Device Package 14-CDIP	Noise - 10Hz to 10kHz	-
Current - Cathode - Operating Temperature -55°C ~ 125°C (TA) Mounting Type Through Hole Package / Case 14-CDIP (0.300", 7.62mm) Supplier Device Package 14-CDIP	Voltage - Input	13.5 V ~ 22 V
Operating Temperature  -55°C ~ 125°C (TA)  Mounting Type  Through Hole  Package / Case  14-CDIP (0.300", 7.62mm)  Supplier Device Package  14-CDIP	Current - Supply	6mA
Mounting Type Through Hole Package / Case 14-CDIP (0.300", 7.62mm) Supplier Device Package 14-CDIP	Current - Cathode	-
Package / Case 14-CDIP (0.300", 7.62mm) Supplier Device Package 14-CDIP	Operating Temperature	-55°C ~ 125°C (TA)
Supplier Device Package 14-CDIP	Mounting Type	Through Hole
	Package / Case	14-CDIP (0.300", 7.62mm)
Report errors?	Supplier Device Package	14-CDIP
		Report errors?

### **VRE102MA Guarantees**



#### **Quality Guarantees**

We provide 90 days warranty. \*

If the items you received were not in perfect quality, we would be responsible for your refund or replacement, but the items must be returned in their original condition.



#### **Service Guarantees**

We guarantee 100% customer satisfaction.

Our experienced sales team and tech support team back our services to satisfy all our customers.

## **VRE102MA Payment Methods**



















## **VRE102MA Shipping Methods**













If you have any question about VRE102MA, please do not hesitate to contact us!

Website: https://www.heisener.com E-mail: salesdept@heisener.com