



Gunn Regulators/Modulators

QCR

Characteristics

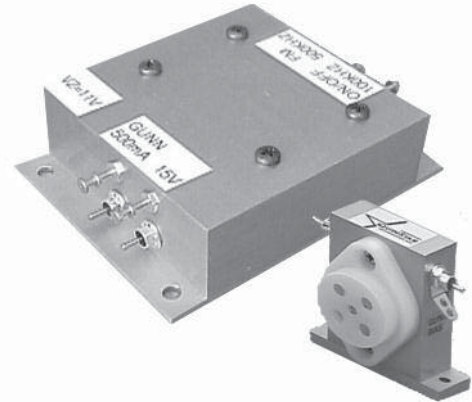
- ◆ Low Noise/Low Ripple
- ◆ Modulation Capability
- ◆ Adjustable Output Voltage

Product Description

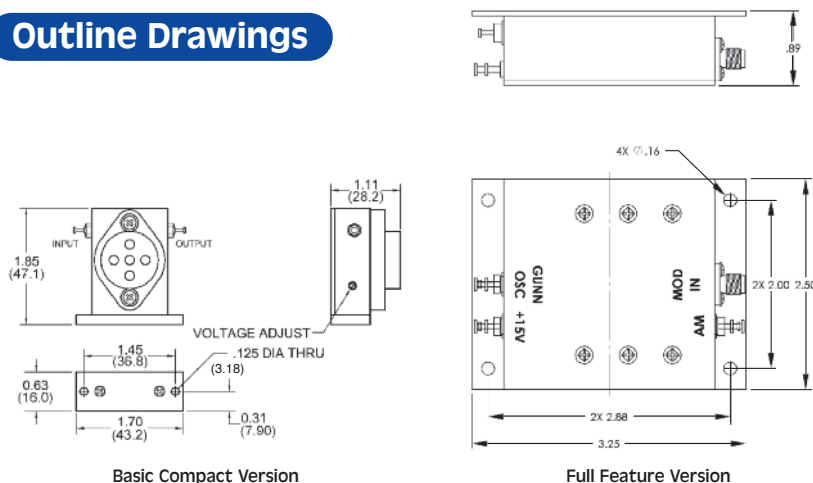
QuinStar Technology offers QCR series Gunn Bias Regulator and Modulators for providing bias voltage to Gunn oscillators in a safe and reliable manner. These are available in two configurations: the basic Compact Regulator and the Full Feature Regulator/Modulator version. The Compact Regulator provides a fixed regulated bias voltage, which may be adjusted by a screw adjustment. The Full Feature version has AM (amplitude modulation; ON/OFF) and FM (frequency modulation) capability. AM feature is used to turn the bias voltage on and off by supplying an external TTL control signal at speeds up to 10 kHz (or higher as a custom product). The FM feature allows the output Gunn bias voltage to be

continuously varied over a prescribed range by applying a signal between + 5 and - 5 volts. This may be used to change the operating frequency of the Gunn oscillator (FM) or its power level, depending on the oscillator type or application. The FM feature can also be used to phase-lock a Gunn oscillator using an external phase-lock loop or source-locking frequency counter.

Both versions provide a low-noise, low-ripple constant voltage output with capability of providing current up to a maximum of 2 amperes. They provide a significant degree of protection from power supply over-voltage and transients.



Outline Drawings



Ordering Information

Model Number **QCR -** **AB C D 00**

output voltage (rounded to nearest Volt)

version

C = compact (basic)
F = full feature

options

0 = none
A = AM modulation
F = FM modulation
M = AM/FM modulation
L = source locking capability
Z = custom