

Safest APD Bias Supply 12-Pin TQFN EP Tube

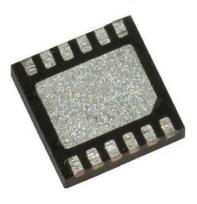
Manufacturer: <u>Maxim Integrated</u>

Package/Case: QFN12

Product Type: Power Management ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

Inquiry

General Description

The MAX1932 generates a low-noise, high-voltage output to bias avalanche photodiodes (APDs) in optical receivers. Very low output ripple and noise is achieved by a constant-frequency, pulse-width modulated (PWM) boost topology combined with a unique architecture that maintains regulation with an optional RC or LC post filter inside its feedback loop. A precision reference and error amplifier maintain 0.5% output voltage accuracy. The MAX1932 protects expensive APDs against adverse operating conditions while providing optimal bias. Traditional boost converters measure switch current for protection, whereas the MAX1932 integrates accurate high-side current limiting to protect APDs under avalanche conditions. A current-limit flag allows easy calibration of the APD operating point by indicating the precise point of avalanche breakdown. The MAX1932 control scheme prevents output overshoot and undershoot to provide safe APD operation without data loss.

Application

Applications

Fiber Optic Network Equipment

Laser Range Finders

Optical Receivers and Modules

PIN Diode Bias Supply

Telecom Equipment

Recommended For You

MAX1636FAP MAX1758FAI+ MAX1673FSA+

Maxim Integrated Maxim Integrated Maxim Integrated

SSOP20 SSOP28 SOP8

MAX1682EUK+T MAX1720EUT+T MAX845ESA+T

Maxim Integrated Maxim Integrated Maxim Integrated

SOT23-5 SOT23-6 SOP-8

MAX1681ESA+ MAX17113ETL+ MAX690CPA+

Maxim Integrated Maxim Integrated Maxim Integrated

SOP-8 QFN DIP8

MAX690MJA MAX6107EUR+T MAX5920BESA+

Maxim Integrated Maxim Integrated Maxim Integrated

CDIP8 SOT23-3 SOP-8

MAX5922AEUI+ MAX5900ABEIT+T MAX5903LBEUT

Maxim Integrated Maxim Integrated Maxim Integrated

TSSOP28 TDFN-6 SOT23-6