

产品概览

FOD8334: 输入 LED 驱动，4.0 A 输出电流，IGBT 驱动光耦合器带不饱和检测，隔离故障感应和有源米勒箝位

欲看完整文档，请参阅数据表。

FOD8334 是一款 4.0 A 输出电流 IGBT 驱动光耦合器，能够驱动额定值最高为 1,200 V 和 150 A 的中等功率 IGBT。它适用于电机控制逆变器应用和高性能电源系统中使用的功率 IGBT 和 MOSFET 的快速开关驱动。FOD8334 提供了一些必需的保护特性，防止发生导致 IGBT 破坏性热崩溃的故障情况。该器件利用安森美半导体的专属共面封装技术 Optoplanar® 和优化的集成电路设计来实现可靠的高隔离和高抗扰度，具有高共模抑制和电源抑制规定特性。该器件采用宽体，16 引脚，小外形塑料封装。该门极驱动沟道包含一个与高速驱动集成电路进行光耦合的镓铝砷 (AlGaAs) 发光二极管 (LED)，该集成电路带有低 RDS(ON) MOSFET 输出级。故障感应沟道包括一个与集成的高速反馈电路进行光耦合的 AlGaAs 发光二极管 (LED)，用于进行故障感应。

特性

- Input LED Drive Facilitates Receiving Digitally Encoded Signals from PWM Output
- Optically Isolated Fault-Sensing Feedback
- Active Miller Clamp to Shut Off IGBT During High dv/dt without Negative Supply Voltage
- High Noise Immunity Characterized by Common Mode Rejection – 35 kV/μs Minimum, VCM = 1500 VPEAK
- 4.0 A Maximum Peak Output Current Driving Capability for Medium Power IGBT– P-Channel MOSFETs at Output Stage Enable Output Voltage Swing Close to Supply Rail (Rail-to-Rail Output)– Wide Supply Voltage Range: 15 V to 30 V
- Integrated IGBT Protection
 - Desaturation Detection
 - “Soft” IGBT Turn-Off
 - Under-Voltage Lockout (UVLO) with Hysteresis
- Fast Switching Speed Over Full Operating Temperature Range
 - 250 ns Maximum Propagation Delay
 - 100 ns Maximum Pulse Width Distortion
- Extended Industrial Temperature Range:
 - –40°C to 100°C
- Safety and Regulatory Approvals– UL1577, 4,243 VRMS for 1 Minute– DIN-EN/IEC60747-5-5 (Pending Approvals):1,414 VPEAK Working Insulation Voltage Rating 8,000 VPEAK Transient Isolation Voltage Rating 8 mm Creepage and Clearance Distance

应用

- Automation
- Consumer Appliances
- Energy Generation & Distribution
- Industrial Motor
- Motion Control - Industrial Motor

器件电气规格

产品	Pricing (\$/Unit)	Compliance	Status	I _{FLH} (Max) (mA)	I _{DDL} , I _{DDH} (Max) (mA)	I _{OL} , I _{OH} (Min) (A)	t _{PHL} , t _{PLH} (Max) (ns)	PWD (Max) (ns)	V _{UVLO} (Typ) (V)	V _{UVLO} (Typ) (V)	CMR (Min) (kV/μs)	V _{ISO} (Min) (V)	T _{OPR} (Min) (°C)	T _{OPR} (Max) (°C)	Package Type
FOD8334	2.5999	Pb-free non AEC-Q and PPAP	Active	7	5	3	250	100	11.7	10.7	35	4243	-40	100	SOIC16 W
FOD8334R2	6.5618	Pb-free non AEC-Q and PPAP	Active	7	5	3	250	100	11.7	10.7	35	4243	-40	100	SOIC16 W

欲了解更多信息，请联系您当地的销售支援 www.onsemi.cn。

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