

# FOD8342

## 3.0 A SOP 6

FOD8342 3.0 A IGBT/MOSFET IGBT/MOSFET FOD8342 8 mm / (FOD8342T) IC FOD8342 (AlGaAs) (LED) MOSFET 6

- FOD8342T - 8 mm Creepage and Clearance Distance, and 0.4 mm Insulation Distance to Achieve Reliable and High-Voltage Insulation
- 3.0 A Peak Output Current Driving Capability for Medium-Power IGBT/MOSFET– Use of P-Channel MOSFETs at Output Stage Enables Output Voltage Swing Close to Supply Rail
- 20 kV/μs Minimum Common Mode Rejection
- Wide Supply Voltage Range: 10 V to 30 V
- Fast Switching Speed Over Full Operating Temperature Range– 210 ns Maximum Propagation Delay– 65 ns Maximum Pulse Width Distortion
- Under-Voltage Lockout (UVLO) with Hysteresis
- Extended Industrial Temperature Range: -40°C to 100°C
- Safety and Regulatory Approvals:– UL1577, 5,000 VACRMS for 1 Minute– DIN EN/IEC60747-5-5, 1,140V Peak Working Insulation Voltage
- AC and Brushless DC Motor Drives
- Industrial Inverter
- Uninterruptible Power Supply
- Induction Heating
- Isolated IGBT/Power MOSFET Gate Drive

	Pricing (\$/Unit)	Compliance	Status	I <sub>FLH</sub> (Max) (mA)	I <sub>DDL</sub> , I <sub>DDH</sub> (Max) (mA)	I <sub>OL</sub> , I <sub>OH</sub> (Min) (A)	t <sub>PHL</sub> , t <sub>PLH</sub> (Max) (ns)	PWD (Max) (ns)	V <sub>UVLO</sub> (Typ) (V)	V <sub>UVLO</sub> (Typ) (V)	CMR (Min) (kV/μs)	V <sub>ISO</sub> (Min) (V)	T <sub>OPR</sub> (Min) (°C)	T <sub>OPR</sub> (Max) (°C)	Package Type
FOD8342	1.2398	Pb	Active	7.5	4	2.5	210	65	8.3	7.7	20	5000	-40	100	SOIC-6
FOD8342R2	1.1425	Pb	Active	7.5	4	2.5	210	65	8.3	7.7	20	5000	-40	100	SOIC-6
FOD8342R2V	1.0066	Pb	Active	7.5	4	2.5	210	65	8.3	7.7	20	5000	-40	100	SOIC-6
FOD8342T	0.8162	Pb	Active	7.5	4	2.5	210	65	8.3	7.7	20	5000	-40	100	SOIC6 W
FOD8342TR2	0.6844	Pb	Active	7.5	4	2.5	210	65	8.3	7.7	20	5000	-40	100	SOIC6 W
FOD8342TR2V	1.02	Pb	Active	7.5	4	2.5	210	65	8.3	7.7	20	5000	-40	100	SOIC6 W
FOD8342TV	1.0066	Pb	Active	7.5	4	2.5	210	65	8.3	7.7	20	5000	-40	100	SOIC6 W
FOD8342V	1.1938	Pb	Active	7.5	4	2.5	210	65	8.3	7.7	20	5000	-40	100	SOIC-6