

## Product Overview

### FOD2743B: 8-PIN DIP Error Amplifier Optocoupler

For complete documentation, see the data sheet.

The FOD2743 Optically Isolated Amplifier consists of the popular KA431 precision programmable shunt reference and an optocoupler. The optocoupler is a gallium arsenide (GaAs) light emitting diode optically coupled to a silicon phototransistor. It comes in 3 grades of reference voltage tolerance = 2%, 1% and 0.5%. The Current Transfer Ratio, (CTR) ranges from 50% to 100%. It also has an outstanding temperature coefficient of 50 ppm/°C. It is primarily intended for use as the error amplifier/reference voltage/optocoupler function in isolated ac to dc power supplies and dc/dc converters. When using the FOD2743, power supply designers can reduce the component count and save space in tightly packaged designs. The tight tolerance eliminates the need for adjustments in many applications. The device comes in an 8-pin dip white package.

### Features

- Optocoupler, precision reference and error amplifier in single package
- 2.5V reference
- CTR 50% to 100% at 1mA
- 5,000V RMS isolation
- UL approval E90700, Vol. 2; CSA approval 1296837; VDE approval pending; BSI approval pending
- Low temperature coefficient 50 ppm/°C max
- FOD2743A: tolerance 0.5%; FOD2743B: tolerance 1%; FOD2743C: tolerance 2%

### Applications

- AC-DC Merchant Power Supply
- Consumer Appliances
- Industrial Motor

### Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	V <sub>REF</sub> Tolerance (%)	V <sub>REF</sub> (Min) (V)	V <sub>REF</sub> (Typ) (V)	V <sub>REF</sub> (Max) (V)	CTR (Min) (%)	CTR (Max) (%)	CTR tested @ I <sub>F</sub> (mA)	V <sub>CE(sat)</sub> (Max) (V)	BV <sub>CE0</sub> (Min) (V)	V <sub>ISO</sub> (Min) (V)	T <sub>OPR</sub> (Min) (°C)	T <sub>OPR</sub> (Max) (°C)	Package Type
FOD2743B	0.6587	Pb-free non AEC-Q and PPAP	Active	1	2.47	2.495	2.52	50	100	1	0.4	70	5000	-25	85	PDIP-8
FOD2743BS	0.6587	Pb-free non AEC-Q and PPAP	Active	1	2.47	2.495	2.52	50	100	1	0.4	70	5000	-25	85	PDIP-8 GW
FOD2743BSD	0.7333	Pb-free non AEC-Q and PPAP	Active	1	2.47	2.495	2.52	50	100	1	0.4	70	5000	-25	85	PDIP-8 GW
FOD2743BSDV	0.6986	Pb-free non AEC-Q and PPAP	Active	1	2.47	2.495	2.52	50	100	1	0.4	70	5000	-25	85	PDIP-8 GW
FOD2743BSV	0.672	Pb-free non AEC-Q and PPAP	Active	1	2.47	2.495	2.52	50	100	1	0.4	70	5000	-25	85	PDIP-8 GW
FOD2743BTV	0.6801	Pb-free non AEC-Q and PPAP	Active	1	2.47	2.495	2.52	50	100	1	0.4	70	5000	-25	85	PDIP-8
FOD2743BV	0.672	Pb-free non AEC-Q and PPAP	Active	1	2.47	2.495	2.52	50	100	1	0.4	70	5000	-25	85	PDIP-8

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Created on: 1/27/2021