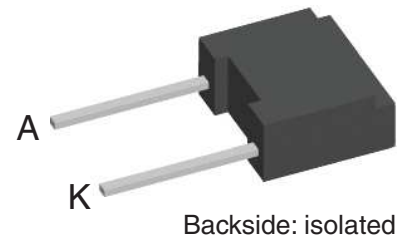


Breakover Diode Gen² (BOD2)

 $V_{BO} = 400-1400 \text{ V}$
 $I_{AVM} = 0.9 \text{ A}$

V_{BO} [V]	Standard Types
400 ±50	IXBOD2-04
500 ±50	IXBOD2-05
600 ±50	IXBOD2-06
700 ±50	IXBOD2-07
800 ±50	IXBOD2-08
900 ±50	IXBOD2-09
1000 ±50	IXBOD2-10
1100 ±50	IXBOD2-11
1200 ±50	IXBOD2-12
1300 ±50	IXBOD2-13
1400 ±50	IXBOD2-14



Features / Advantages:

- Extra fast turn-on
- Very low temperature dependence
- Very low leakage current

Applications:

- High voltage circuit protection
- Transient voltage protection
- Trigger device
- Power pulse generators
- Lightning and arcing protection
- Energy discharge circuits
- Battery overvoltage protection
- Solar array protection

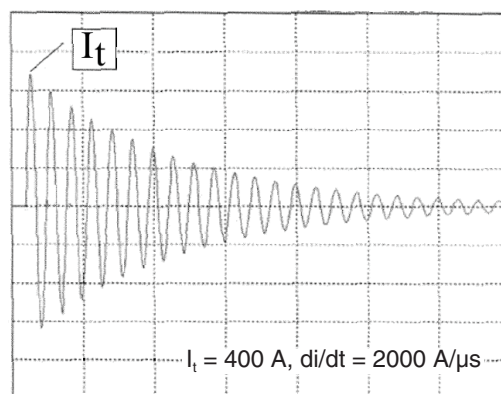
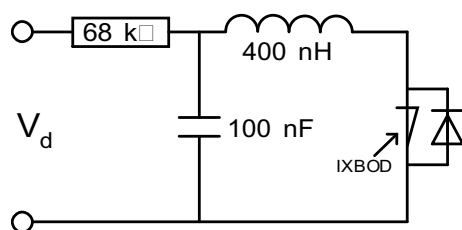
Package: FP-Case

- Industry standard outline
- RoHS compliant
- Epoxy meets UL 94V-0
- Soldering pins for PCB mounting
- Base plate: Plastic overmolded tab
- Reduced weight

Disclaimer Notice

Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at www.littelfuse.com/disclaimer-electronics.

BOD2				Ratings		
Symbol	Definitions	Conditions	min.	typ.	max.	
I_D	drain current	$V_D = 0.8 \cdot V_{BO}$			10 200	μA μA
V_{BO}	breakover voltage	$V_{BO}(T_{VJ}) = V_{BO, 25^\circ\text{C}} [1 + K_T (T_{VJ} - 25^\circ\text{C})]$				V
I_{RMS}	RMS current	$f = 50 \text{ Hz}$ pins soldered to printed circuit (conductor 0.035x2mm)			1.4	A
I_{FAVM}	maximum average forward current				0.9	A
I_{SM}	maximum pulsed source current	$t_p = 0.1 \text{ ms}$; non repetitive			250	A
I^2t	I^2t value for fusing	$t_p = 0.1 \text{ ms}$			3.1	A^2s
K_T	temperature coefficient of V_{BO}				$0.7 \cdot 10^{-3}$	K^{-1}
K_P	coefficient for energy per pulse EP (material constant)				700	K/Ws
R_{thJA}	thermal resistance junction to ambient	natural convection with air speed 2 m/s			60 45	K/W K/W
I_{BO}	breakover current				15 6	mA mA
I_H	holding current				20 12	mA mA
V_H	holding voltage		4		8	V
$(dv/dt)_{cr}$	critical rate of rise of voltage	$V_D = 0.9 \cdot V_{BO}$			3000 1000	$\text{V}/\mu\text{s}$ $\text{V}/\mu\text{s}$
$(di/dt)_{cr}$	critical rate of rise of current	$I_T = 100 \text{ A}$; $V_D = V_{BO}$; $f = 50 \text{ Hz}$ $I_T = 600 \text{ A}$; non repetitive			200 500	$\text{A}/\mu\text{s}$ $\text{A}/\mu\text{s}$
t_q	turn-off time	$V_D = 0.75 \cdot V_{BO}$; $V_R = 0 \text{ V}$; $I_T = 100 \text{ A}$ $dv/dt_{(lin.)} = 5000 \text{ V}/\mu\text{s}$; $di/dt = -500 \text{ A}/\mu\text{s}$		200		μs
V_T	forward voltage drop	$I_T = 10 \text{ A}$			1.3 1.2	V V
V_{T0}	threshold voltage	for power-loss calculation only			0.75	V
r_T	slope resistance				0.05	Ω



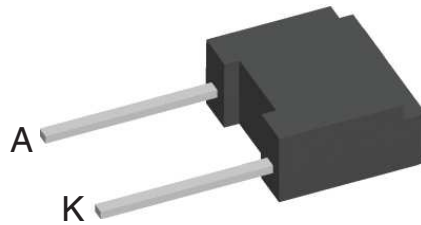
Package FP-Case			Ratings			
Symbol	Definitions	Conditions	min.	typ.	max.	
T_{amb}	ambient temperature (cooling medium)		-40		150	°C
T_{stg}	storage temperature		-40		150	°C
T_{vJM}	maximum virtual junction temperature		-40		150	°C
Weight				0.9		g

Product Marking



Ordering	Part Name	Marking on Product	Delivering Mode	Base Qty	Ordering Code
Standard	IXBOD2-04	IXBOD2-04	Box	100	511174
Standard	IXBOD2-05	IXBOD2-05	Box	100	tbd
Standard	IXBOD2-06	IXBOD2-06	Box	100	tbd
Standard	IXBOD2-07	IXBOD2-07	Box	100	508425
Standard	IXBOD2-08	IXBOD2-08	Box	100	507602
Standard	IXBOD2-09	IXBOD2-09	Box	100	511668
Standard	IXBOD2-10	IXBOD2-10	Box	100	508078
Standard	IXBOD2-11	IXBOD2-11	Box	100	511860
Standard	IXBOD2-12	IXBOD2-12	Box	100	511675
Standard	IXBOD2-13	IXBOD2-13	Box	100	511682
Standard	IXBOD2-14	IXBOD2-14	Box	100	509782

Outlines FP-case



Dimensions in mm
(1 mm = 0.0394")

