

HIGH VOLTAGE BIDIRECTIONAL TRIGGER DIODE

FEATURES

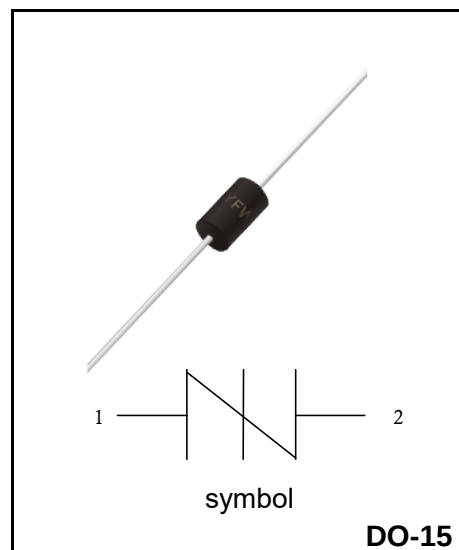
The sidac is a silicon bilateral voltage triggered switch with greater power-handling capabilities than standard diacs. Upon application of a voltage exceeding the sidac breakover voltage point, the sidac switches on through a negative resistance region to a low on-state voltage. Conduction continues until the current is interrupted or drops below the minimum holding current of the device.

APPLICATIONS

- ♦High-voltage lamp ignitors
- ♦Natural gas ignitors
- ♦Gas oil ignitors
- ♦High-voltage power supplies
- ♦Xenon ignitors
- ♦Overvoltage protector
- ♦Pulse generators
- ♦Fluorescent lighting ignitors HID lighting ignitors

FEATURES

- ♦Excellent capability of absorbing transient surge
- ♦Quick response to surge voltage (ns Level)
- ♦Glass-passivated junctions
- ♦High voltage lcmp ignitors



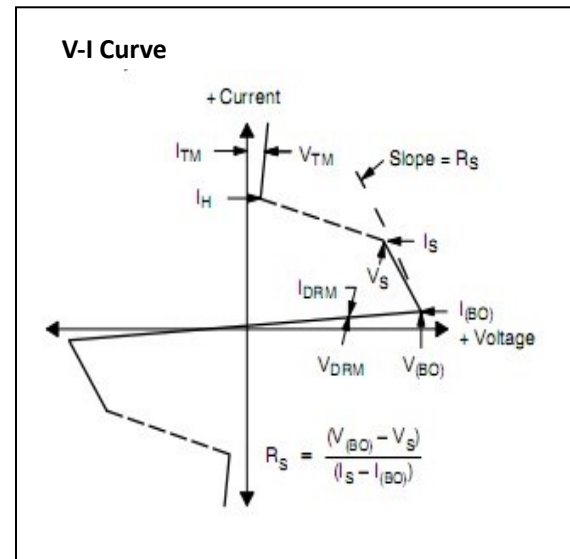
Absolute Maximum Ratings

(TA=25℃, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Unit
Storage temperature range	T _{STG}	-40 to +125	℃
Operating junction temperature range	T _J	-40 to +125	℃
On-state RMS current	I _T	1.0	A
Maximum surge on-state current non-repetitive one cycle peak value (50Hz)	I _{TSM}	16.7	A
Critical rate-of-rise of on-state current	di _T /dt	80	A/μs

Electrical Characteristics (T_a=25°C)

Symbol	Parameter
V _{DRM}	Peak off-state voltage
I _{DRM}	Off-state current
V _S	Switching voltage
I _S	Switching current
R _S	Switching resistance
V _T	On-state voltage
I _H	Holding current
V _{BO}	Breakover Voltage
I _{BO}	Breakover current



Electrical Characteristics (T_a=25°C, Continued)

Part Number	Marking	I _{DRM} @V _{DRM}		V _{BO}		I _{BO}	V _T @I _T =1A	I _H	R _S
		μA	V	V		μA	V	mA	kΩ
		max	min	min	max	max	max	min	min
K090	K090	1	70	80	97	50	2	10	0.1
K105	K105	1	90	95	113	50	2	10	0.1
K120	K120	1	100	110	125	50	2	10	0.1
K130	K130	1	110	120	138	50	2	10	0.1
K140	K140	1	120	130	146	50	2	10	0.1
K150	K150	1	130	140	170	50	2	10	0.1
K180	K180	1	160	170	195	50	2	10	0.1
K200	K200	1	180	190	215	50	2	10	0.1
K220	K220	1	190	205	230	50	2	10	0.1
K240	K240	1	200	220	250	50	2	10	0.1
K260	K260	1	220	240	270	50	2	10	0.1

FIG.1: Maximum allowable ambient temperature versus on-state current

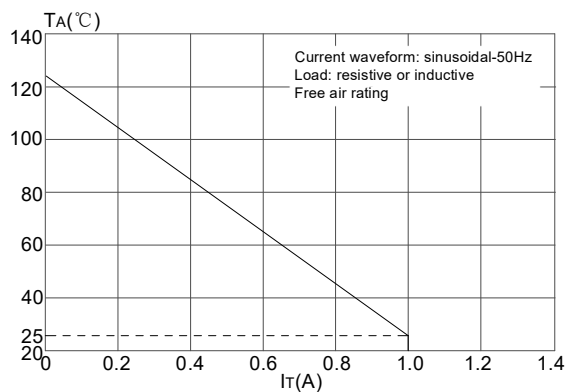


FIG.2: Reflow condition

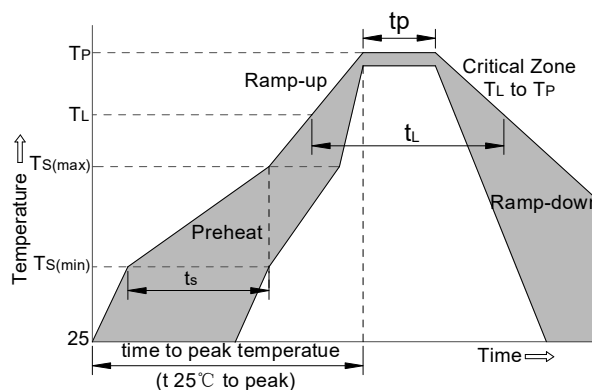


FIG.3: Normalized V_s change vs. junction temperature

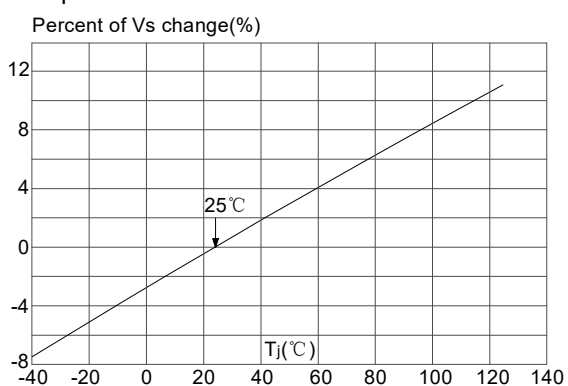
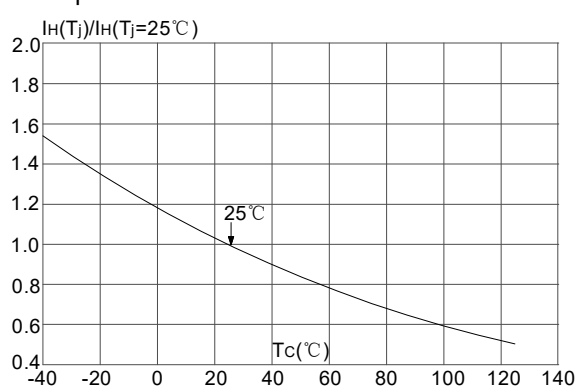


FIG.4: Normalized DC holding current vs. case temperature



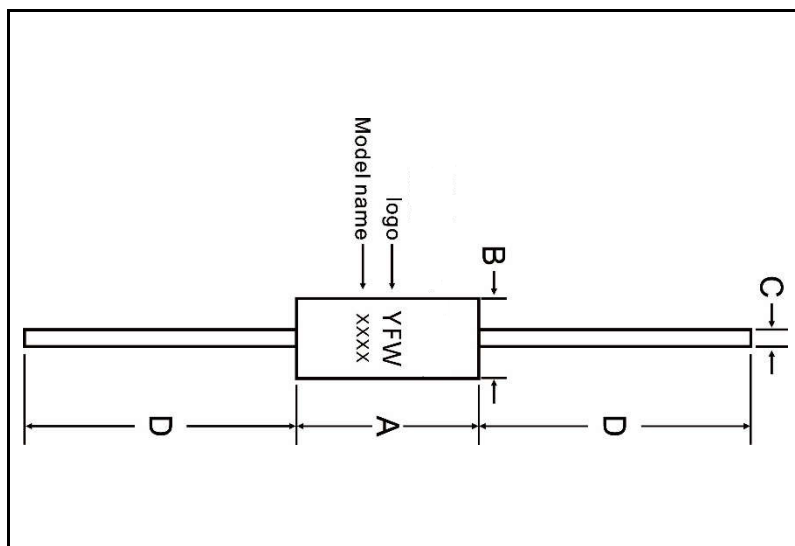
Ordering information

Package	Packing Description	Packing Quantity
DO-15	bulk	500PCS/Inner Box 30000PCS/Carton
	ammo pack	3000PCS/Inner Box 30000PCS/Carton

Package Dimensions

DO-15

Dim.	Millimeter(mm)		INCHES	
	Min.	Max.	Min.	Max.
A	5.80	7.60	0.230	0.300
B	2.60	3.60	0.104	0.140
C	0.71	0.86	0.028	0.034
D	25.4	-	1.00	-



Disclaimer

The information presented in this document is for reference only. Guangdong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.