

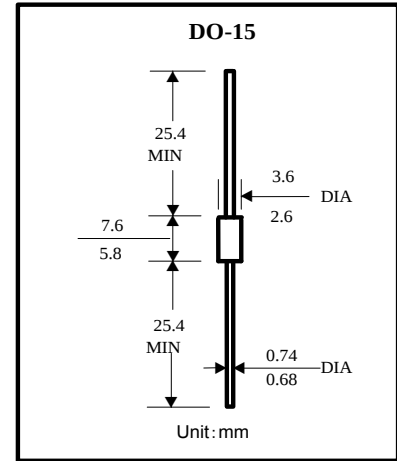
Sidac High Voltage Bidirectional Triggers 1A Mpere RMS

Features

- High pressure Sodium Vapor Lighting
- High Voltage Regulators
- Pulse Generators
- Used to Trigger Gates of SCR's and Triacs
- These are Pb free Devices*
- LED lamp protection

Mechanical Data

- Terminals: Plated axial leads
- Mounting Position: Any



Maximum Ratings & Thermal Characteristics

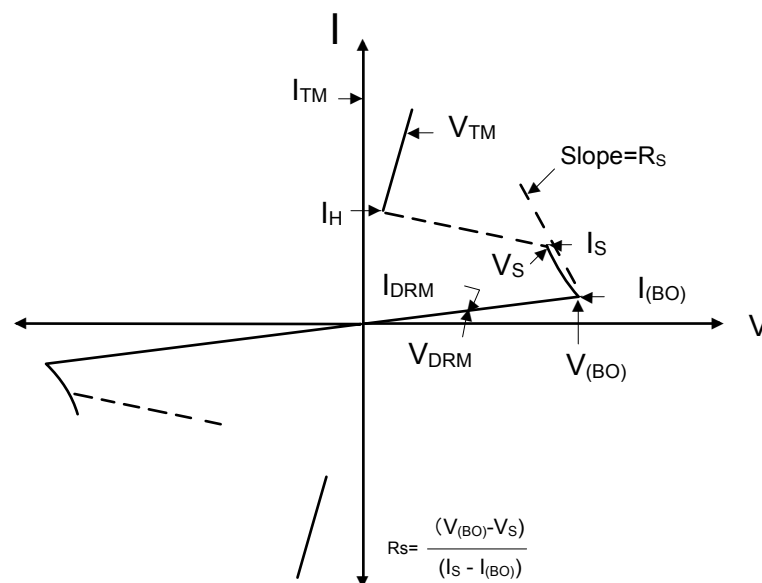
Ratings at 25°C ambient temperature unless otherwise specified.

Rating	Symbols	K300	Unit
Maximum repetitive peak reverse voltage (Sine Wave, 50 to 60 Hz, $T_J = -40$ to 125°C)	V_{DRM} V_{RRM}	± 240	V
On-state RMS current ($T_J = 80^\circ\text{C}$, Lead Length = 3/8", All Conduction Angles)	$I_{T(RMS)}$	± 1.0	A
Peak Non Repetitive Surge Current (60 Hz One Cycle Sine-wave, $T_J = 125^\circ\text{C}$)	I_{TSM}	± 20	A
Operating Junction Temperature Range	T_J	-40 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-40 to +125	$^\circ\text{C}$
Thermal Resistance, Junction-to-lead (Lead Length = 3/8")	$R_{\theta JA}$	15	$^\circ\text{C/W}$
Lead Solder Temperature (Lead length $\geq 1/16"$ from Case, 10s Max)	T_L	275	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS (TC = 25°C unless otherwise noted;Electricals apply in both directions)

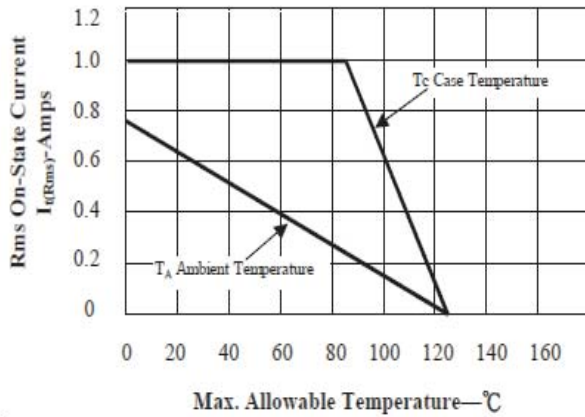
Characteristic	Symbols	YZPST-K3002GRP	Unit
Breakover Voltage, $I_{BO}=200\mu A$	V_{BO}	270	V
		330	
Repetitive peak Off-State Current (50to60Hz Sine Wave)	I_{DRM}	5	μA
Breakover Current	I_{BO}	200	μA
Peak On_State Voltage ($I_{TM}=1A$ Peak,Pulse Width $\leq 300\mu s$,Duty Cycle $\leq 2\%$)	V_{TM}	Typ 1.5 Max 4	V
Dynamic Holding Current (Sine Wave,60Hz, $R_L=100\Omega$)	I_H	Typ 50 Max 100	mA
切换电阻 Switching Resistance (Sine Wave,50to60Hz)	R_S	0.1	K Ω
Critical rate_of_rise of on_state Current, Critical Damped Eaveform Circuit ($IPK=130\Omega$,Pulse Width=10 μsec)	di/dt	120	A/ μS

Voltage Characteristic Characteristic of SIDAC (Bidirectional Device)

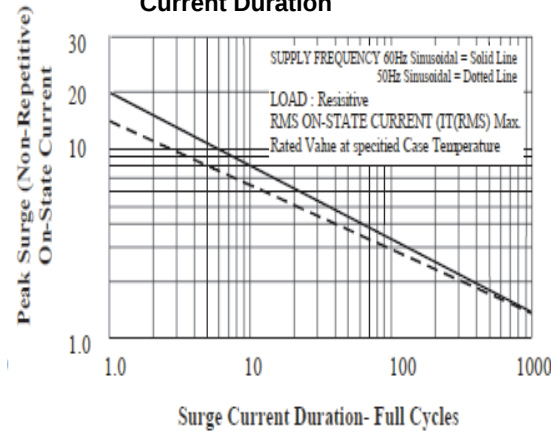


Characteristic Curves

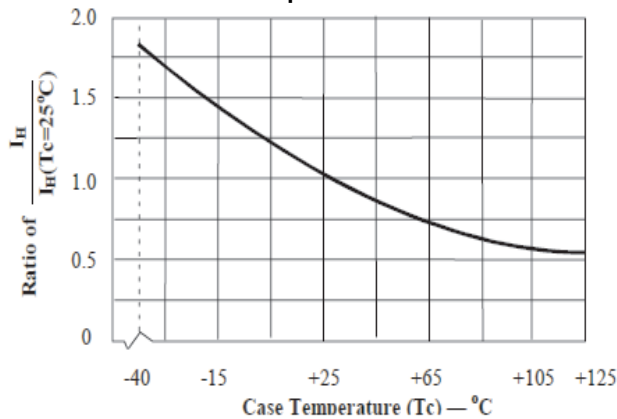
Maximum Allowable Case Temperature
vs On State Current (And Ambient)



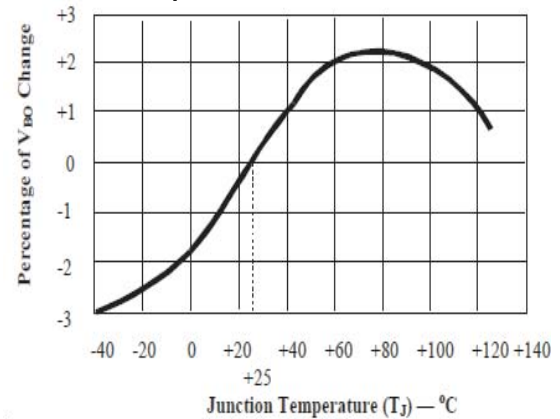
Peak Surge Current vs Surge
Current Duration



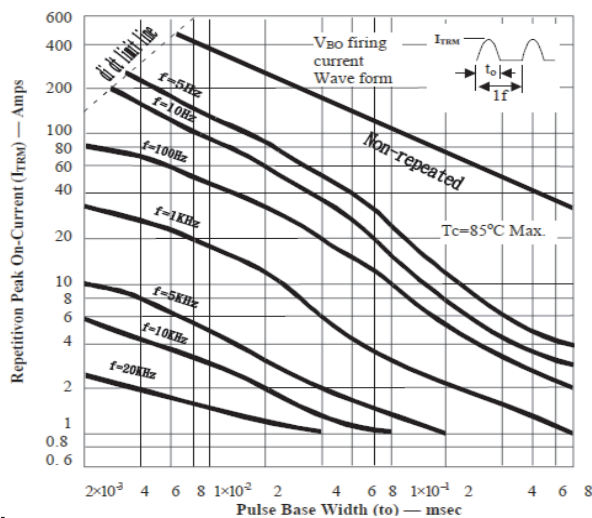
Normalised DC Holding Current
vs Case Temperature



Normalized V_{BO} Change vs Junction
Temperature



High Frequency Current Capacity



Normalized Repetitive Peak Off-State Current
vs Junction Temperature

