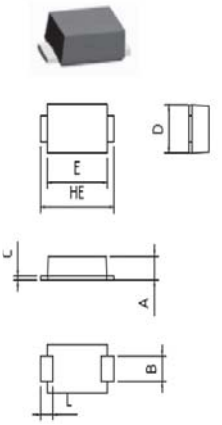
K120(G105)

Sidac High Voltage
Bidirectional Triggers
1A Mpere RMS

硅高压双向触发二极管
峰值工作电流 1A

特征 Features

- 高压钠灯触发器 High pressure Sodium Vapor Lighting
- 高压调整器 High Voltage Regulators
- 脉冲发生器 Pulse Generators
- 代替可控硅 Uesd to Trigg Gates of SCR, s and Triacs
- 无铅器件 These are pb free Devices*
- LDE灯保护 LED lamp protection

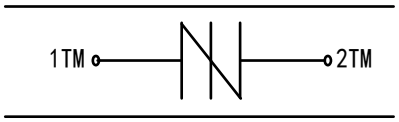


SOD-123

DIH	Unit:mm		
	MIN	TYP	MAX
A	0.9	1.05	1.3
A1	0.0	0.03	0.1
B	0.7	0.8	1.0
C	0.13	0.15	0.2
D	1.6	1.8	2.0
E	2.6	2.8	3.0
L	0.53	0.63	0.73
HE	3.5	3.7	3.9

机械数据 Mechanical Data

- 端子: 镀锡轴向引线 Terminals: Plated axial leads
- 安装位置: 任意 Mounting Position: Any



极限值和温度特性 TA = 25℃ 除非另有规定。

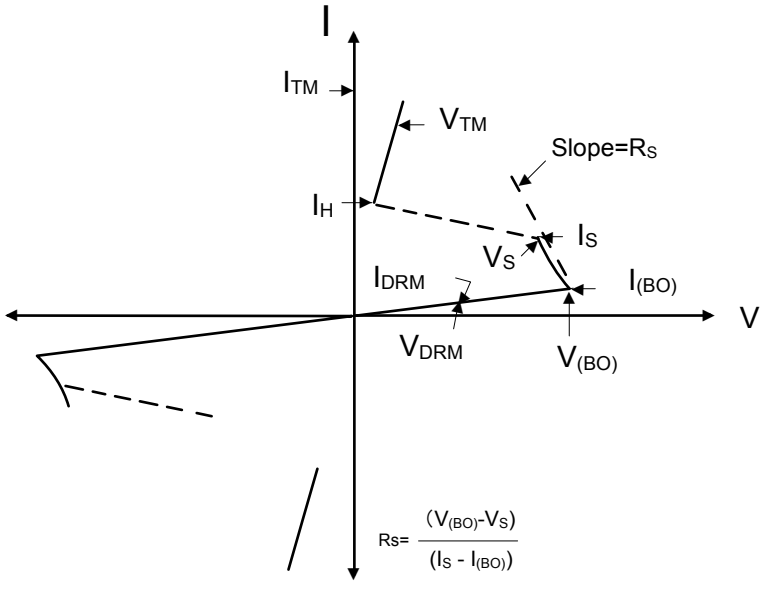
Maximum Ratings & Thermal Characteristics Ratings at 25℃ ambient temperature unless otherwise specified.

Rating	符号 Symbols	K120(G105)	单位 Unit
最大可重复峰值反向电压 Maximum repetitive peak reverse voltage (Sine Wsve,50to60Hz,T_J=-40to125℃)	V_{DRM} V_{RRM}	±90	V
开态均方根电流 On-state RMS current(T_L=80℃,Lead Length=3/8",All Conduction Angles	$I_{T(RMS)}$	±1.0	A
最大浪涌电流 Peak Non Repetitive Surge Current (60Hz One Cycle Sine-wave,T_J=125℃)	I_{TSM}	±20	A
工作温度 Operating Junction Temperature Range	T_J	-40 to +125	℃
储存温度 Storge Temperature Range	T_{stg}	-40 to +125	℃
典型热阻 Thermal Resistance,Junction-to-led (LEAD LENGTH=3/8")	$R_{\theta JA}$	15	℃/W
焊接温度 Lead Solder Temperature (Lead length≧1/16" from Case,10s Max)	T_L	275	℃

电特性 TC = 25℃ 除非另有规定。
ELECTRICAL CHARACTERISTICS (TC = 25℃ unless otherwise noted;Eletricals apply in both directions)

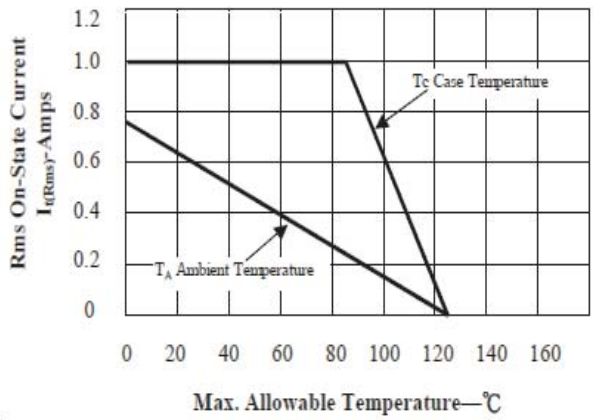
电特性 Characteristic		符号 Symbols	K120(G105)	单位 Unit
转折电压 Breakover Voltage,I_{BO}=200μA	Min	V_{BO}	110	V
	Max		135	
反向漏电 Repetitive peak Off-State Current (50to60Hz Sine Wave)		I_{DRM}	5	μA
转折电流 Breakover Current		I_{BO}	10	μA
通态峰值电压 Peak On_State Voltage (ITM=1APeak,Pulse Width≦300μs,Duty Cycle≦2%)		V_{TM}	Max 1.5	V
动态维持电流 Dynamic Holding Current (Sine Wave,60Hz,R_L=100Ω)	Typ	I_H	20	mA
	Max		30	
切换电阻 Switching Resistance (Sine Wave,50to60Hz)		R_S	0.1	KΩ
电流上升率 Critical rate_of_rise of on_state Current, Critical Damped Eaveform Circuit (IPK=130Ω,Pulse Width=10μsec)		di/dt	120	A/μS

硅高压双向触发二极管的特性曲线
Voltage Characteristic Characteristic of SIDAC (Bidirectional Device)

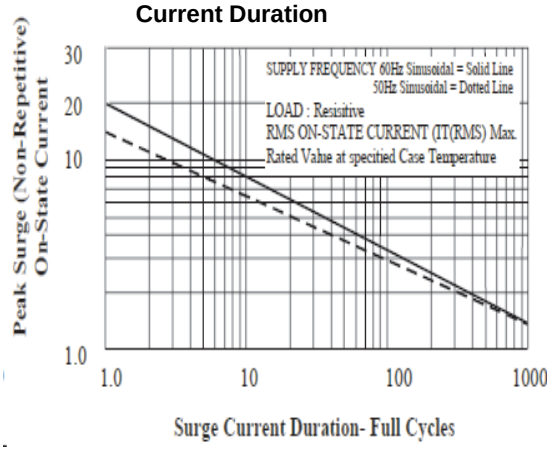


特性曲线 Characteristic Curves

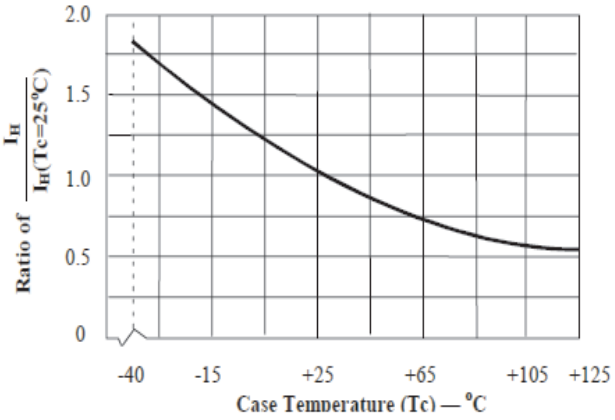
Maximum Allowable Case Temperature vs On State Current (And Ambient)



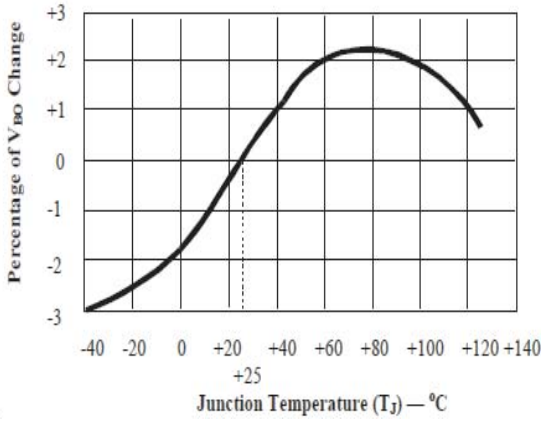
Peak Surge Current vs Surge Current Duration



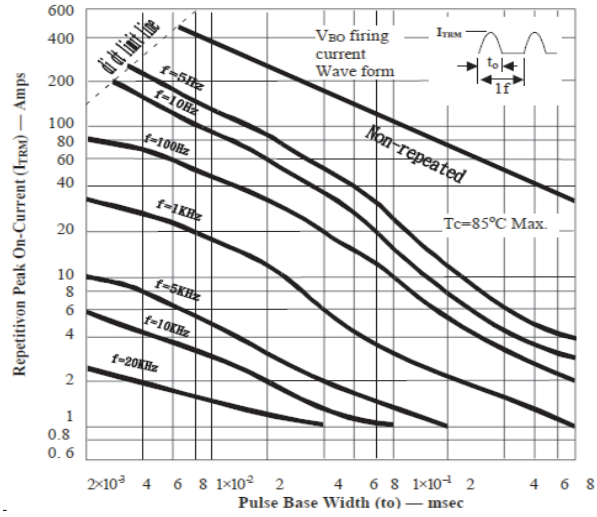
Normalixed DC Holding Current vs Case Temperture



Normalized V_{BO} Change vs Junction Temperature



High Frequency Current Capacity



Normalized Repetitive Peak Off-State Current vs Junction Temperature