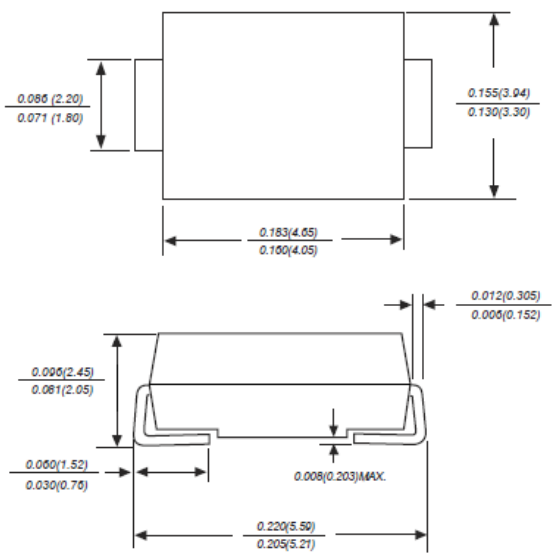
K090 THRU K260

HIGH VOLTAGE BIDIRECTIONAL TRIGGER DIODE

70 to 220 Volts

Pb-Free ROHS COMPLIANT

SMB/DO214AA



Dimensions in millimeters

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Bidirectional crowbar protection
- High surge current capability
- Fast response
- High forward surge current capability
- High temperature soldering guaranteed 250℃/10 seconds on terminals

MECHANICAL DATA

- **Case**: JEDEC DO-214AA molded plastic body
- **Terminals**: Plated leads, solderable per MIL-STD-750, Method 2026
- **Mounting Position**: Any
- **Weight**: 0.0048 ounce, 0.136grams

Thermal Considerations

Symbol	Parameter	Value	Unit
I_T	Average On-state Current (AV)	±1.0	A
T_{TSM}	Maximum Surge Current (50H)	±4.0	A
$R_{\theta JA}$	Thermal Resistance: Junction to Ambient	90	°C/W
T_J	Operating Junction Temperature Range	-40 to +125	°C
T_S	Storage Temperature Range	-65 to +150	°C

Electrical Parameters

Part Number	V_{DRM} Volts	I_{DRM} µAmps	V_{BO} Volts		I_{BO} mAmps	I_H mAmps		V_{TM} Volts
	Min	Max	Min	Max	Max	Min	Max	Max
K090	70	1	80	100	0.5	10	50	2.0
K105	90	1	95	115	0.5	10	50	2.0
K110	95	1	100	120	0.5	10	50	2.0
K120	100	1	110	130	0.5	10	50	2.0
K130	110	1	120	140	0.5	10	50	2.0
K140	120	1	130	150	0.5	10	50	2.0
K150	130	1	140	160	0.5	10	50	2.0
K160	140	1	150	170	0.5	10	50	2.0
K180	160	1	170	190	0.5	10	50	2.0
K200	180	1	190	210	0.5	10	50	2.0
K220	190	1	210	230	0.5	10	50	2.0
K240	200	1	230	250	0.5	10	50	2.0
K260	220	1	250	270	0.5	10	50	2.0

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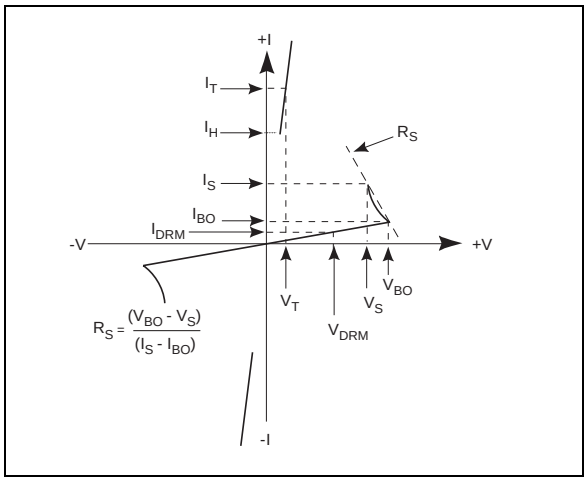
K090 THRU K260

HIGH VOLTAGE BIDIRECTIONAL TRIGGER DIODE

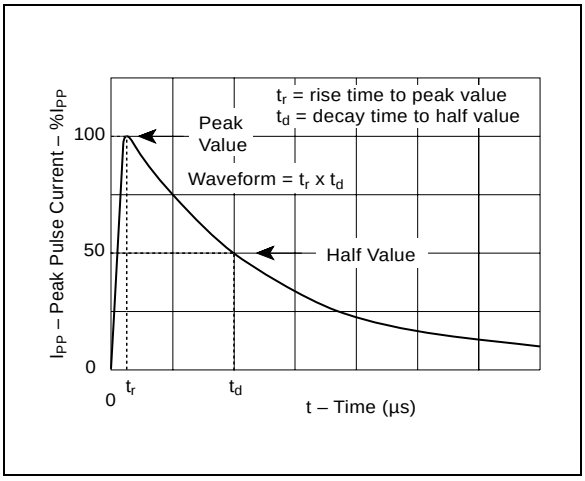
70 to 220 Volts

Pb-Free ROHS COMPLIANT

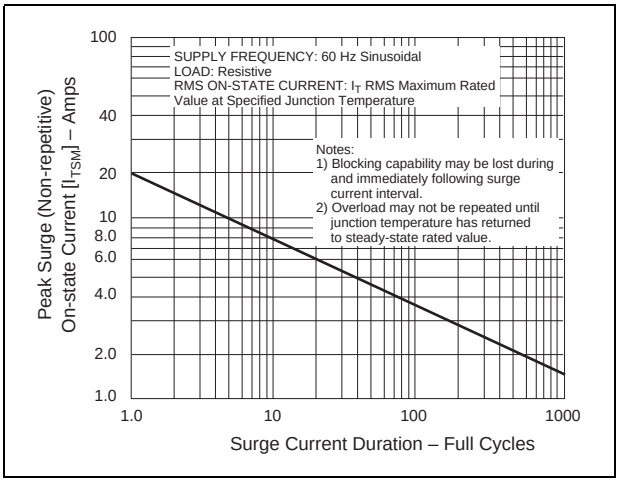
RATINGS AND CHARACTERISTIC CURVES K090 THRU K260



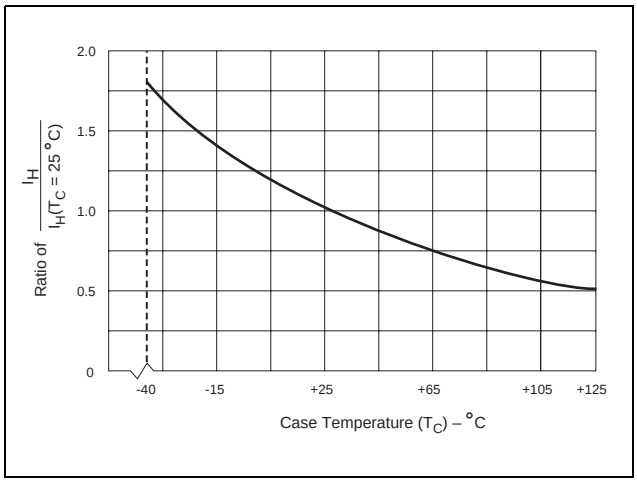
V-I Characteristics



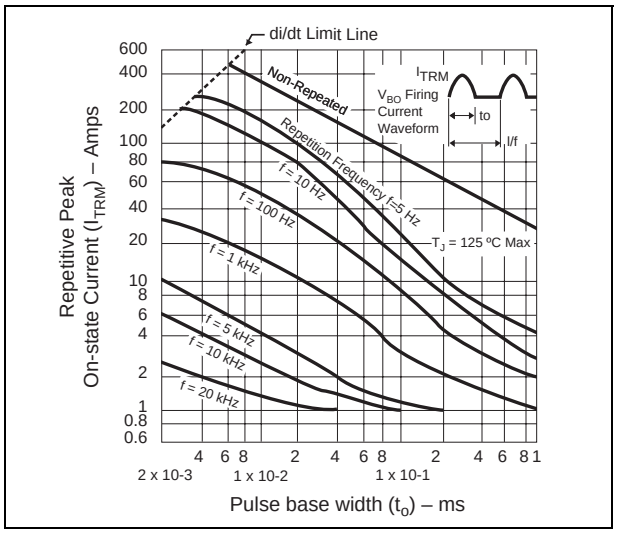
t_r x t_d Pulse Wave-form



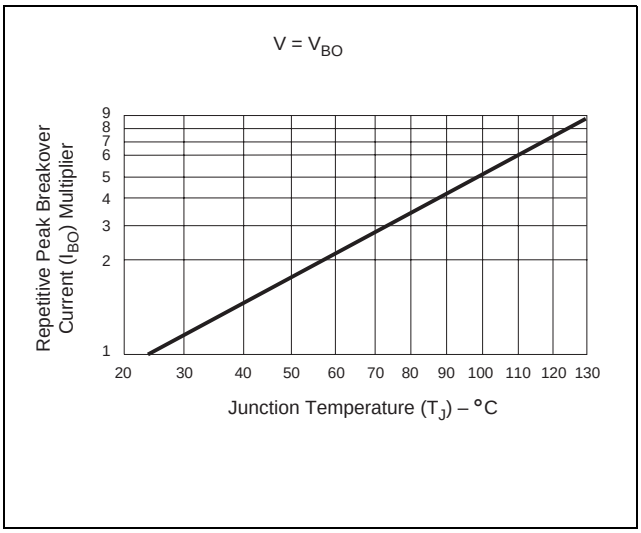
Peak Surge Current versus Surge Current Duration



Normalized DC Holding Current versus Case/Lead Temperature



Repetitive Peak On-state Current (I_{TRM}) versus Pulse Width at Various Frequencies



Normalized Repetitive Peak Breakover Current versus Junction Temperature

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K090 THRU K260

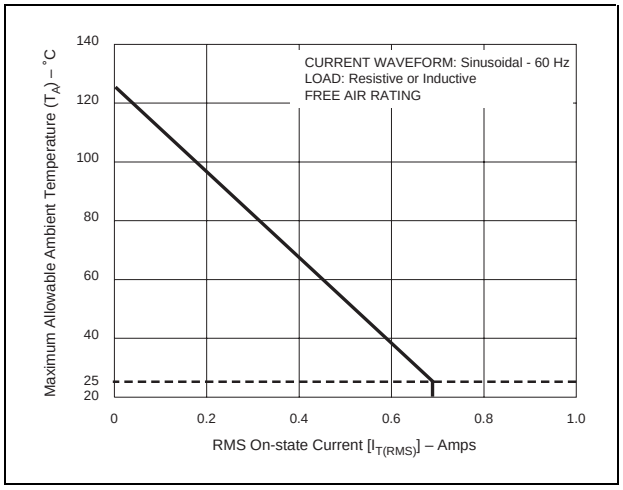
HIGH VOLTAGE BIDIRECTIONAL TRIGGER DIODE

70 to 220 Volts

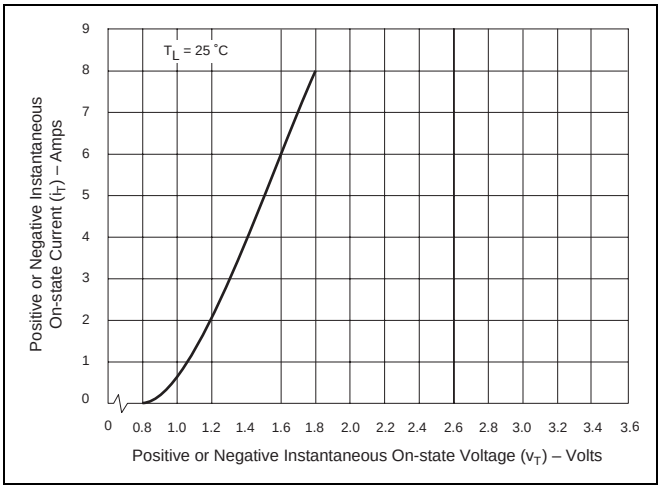
Pb-Free

RoHS COMPLIANT

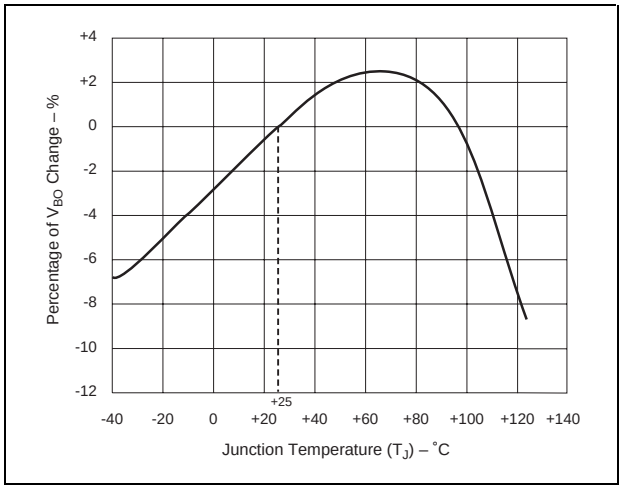
RATINGS AND CHARACTERISTIC CURVES K090 THRU K260



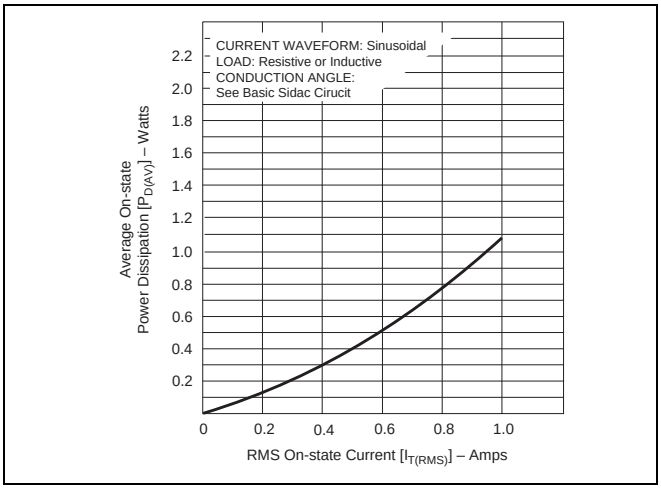
Maximum Allowable Ambient Temperature versus On-state Current



On-state Current versus On-state Voltage (Typical)



Normalized V_{BO} Change versus Junction Temperature



Power Dissipation (Typical) versus On-state Current
[Refer to Figure E9.14 for Basic Sidac Circuit]

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