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SIDAC (95 – 270 VOLTS)

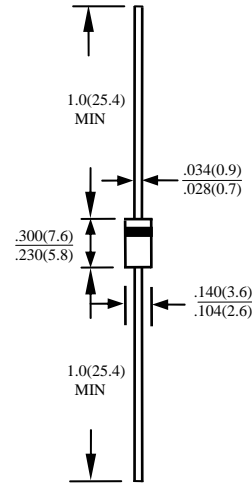
K105 THRU K260

FEATURES

- GLASS PASSIVATED JUNCTIONS
- HIGH SURGE CURRENT CAPABILITY
- DO-15 PACKAGE, DIMENSIONS IN INCHES AND (MILLIMETERS)

APPLICATIONS

- GAS IGNITER
- XENON IGNITERS
- HIGH VOLTAGE LCMP IGNITERS
- PULSE GENERATOR
- OVER VOLTAGE PROTECTOR



RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED

RATINGS	SYMBOL	K105	K110	K120	K130	K200	K220	K240	K260	UNITS
MAXIMUM OFF-STATE VOLTAGE	V_{DRM}	90				180				V
MAXIMUM RMS ON-STATE CURRENT @ TC100°C 60HZ	I_T					1				A
MAXIMUM SURGE ON-STATE CURRENT @ Ta25°C 60HZ NON-REPETITIVE ONE CYCLE PEAK VALUE	I_{TSM}					20				A
TYPICAL PULSE ON-STATE CURRENT @ Ta25°C,PULSE WIDTH 10µS SINE WAVE, REPETITIVE PEAK VALUE F=1KHZ	I_{TRM}					20				A
MAXIMUM CRITICAL RATE OF RISE OF ON-STATE CURRENT	di_T/dt					150				A/µA
MAXIMUM OPERATING TEMPERATURE RANGE	T_J					-40 TO + 125				°C
MAXIMUM STORAGE TEMPERATURE RANGE	T_{STG}					-55 TO + 150				°C

ELECTRICAL CHARACTERISTICS (AT TA =25°C UNLESS OTHERWISE NOTED)

BREAKOVER VOLTAGE @ I_{BO} 0.5mA	VBO	95-113	104-118	110-125	120-138	190-215	200-230	220-250	240-270	UNITS
MAXIMUM OFF-STATE CURRENT @ V_{DRM}	I_{DRM}					10.0				µA
MAXIMUM BREAK OVER CURRENT	I_{BO}					0.5				mA
TYPICAL HOLDING CURRENT	IH					50.0				mA
MAXIMUM ON-STATE VOLTAGE @ $I_T=1A$	V_T					1.5				V
MAXIMUM SWITCHING RESISTANCE	R_S					0.1				Kohm
TYPICAL THERMAL RESISTANCE, JUNCTION TO LEAD	θ_{JL}					20.0				°C/W

NOTE : SIDAC IS A SILICON BILATERAL VOLTAGE TRIGGERED DEVICE. WHILE THE APPLICATION VOLTAGE EXCEEDING THE DEVICE BREAKOVER VOLTAGE POINT, THE DEVICE SWITCHES ON TO A LOW ON-STATE VOLTAGE THRU A NEGATIVE RESISTANCE REGION. ON-STATE CONTINUES UNTIL CURRENT DROPS BELOW DEVICE HOLDING CURRENT LEVEL.

RATINGS AND CHARACTERISTIC CURVE K105 THRU K260

FIG.1-Maximum Allowable Case Temperature vs On State Current (And Ambient)

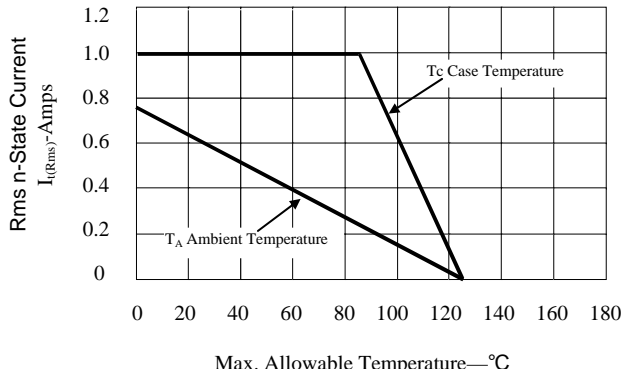


FIG.2-Peak Surge Current vs Surge Current Duration

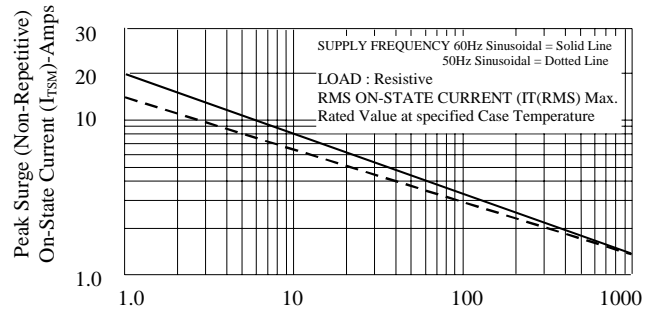


FIG.3-Normalized DC Holding Current vs Case Temperature

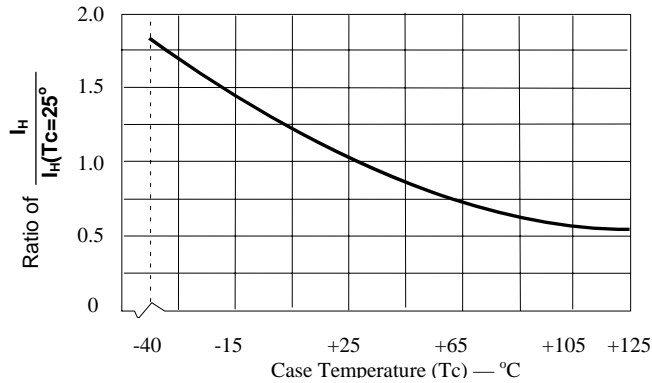


FIG.4-Normalized V_{BO} Change vs Junction Temperature

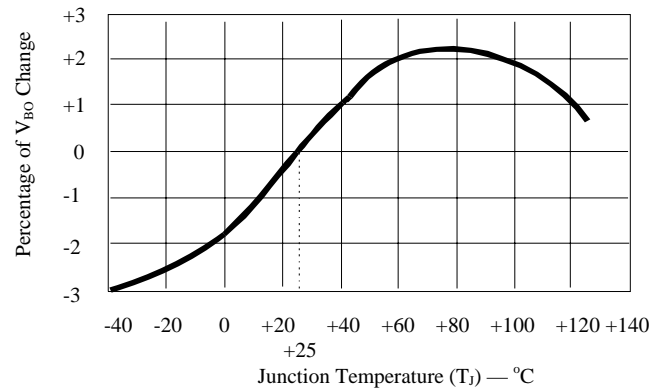


FIG.5-High Frequency Current Capacity

RATINGS AND CHARACTERISTIC CURVE K105 THRU K260

FIG.5-High Frequency Current Capacity

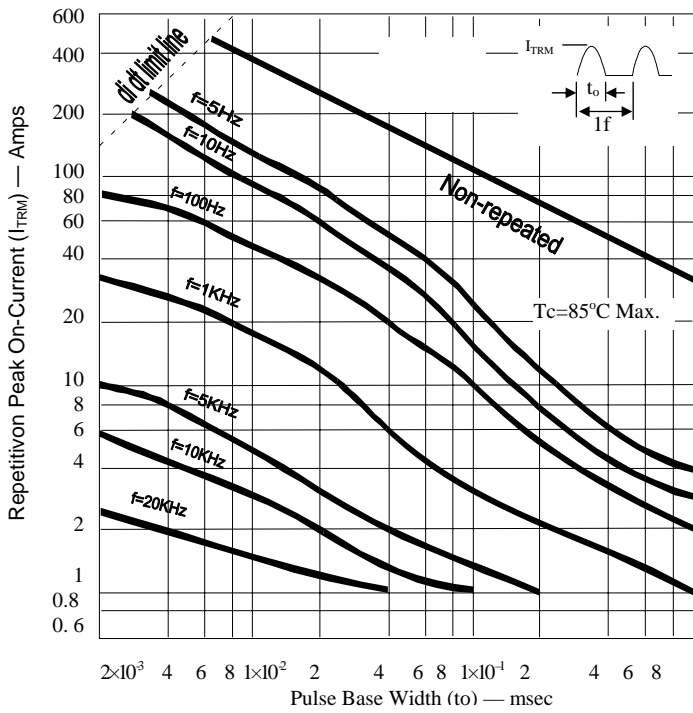


FIG.6-Normalized Repetitive Peak Off-State Current vs Junction Temperature

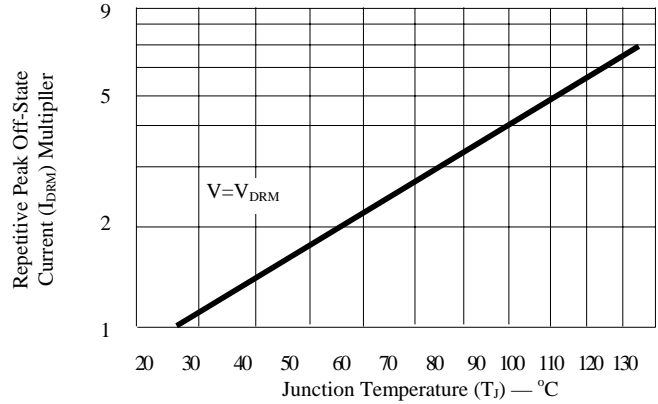


FIG.7- V-I Characteristics

