SIDAC–BIDIRECTIONAL THYRISTOR DIODES
(For Pulse Generating and Switching Applications)

NTE Type Number	Diagram Number	Breakover Voltage (Volts)	Maximum Ratings			Holding Current (mA)	Power Dissipation (mW)
			On Voltage (Volts)	Effective Current (Amps)	Surge Current (Amps)		
		V_{BO}	V_T	I_{TRMS}	I_{TSM}	I_{Hold}	P_D
6415	395	40 to 60	1.5	1	13	50	850
6416	395	55 to 65	1.5	1	13	50	850
6417	395	95 to 113	1.5	1	13	50	850
6418	395	104 to 118	1.5	1	13	50	850
6419	395	110 to 125	1.5	1	13	50	850

Storage Temperature: –30° to +30°C
Junction Temperature: +125°C

DESCRIPTION:

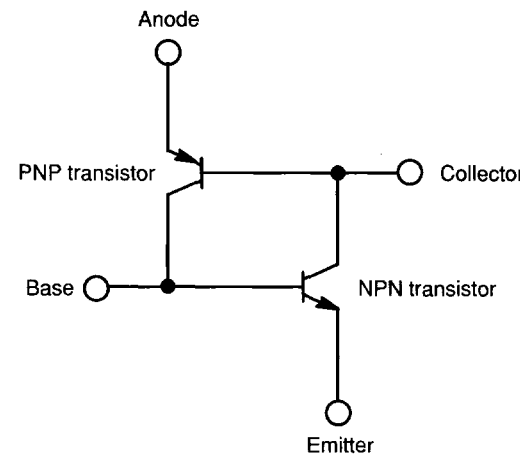
The SIDAC is a silicon bilateral voltage triggered switch with greater power handling capabilities than standard DIACs. Upon application of a voltage exceeding the SIDAC breakover voltage point, the SIDAC switches on through a negative resistance region to a low on–state voltage. Conduction will continue 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 protection
- Pulse generators
- Fluorescent lighting ignitors

SILICON CONTROLLED SWITCH (SCS)

NTE Type Number	Case Style	Diagram Number	Polarity	Maximum Ratings								DC Current Gain @ V_{CB} = 0, I_E = 1mA
				Collector to Base Breakdown Voltage (Volts)	Emitter to Base Breakdown Voltage (Volts)	Collector to Emitter Breakdown Voltage R_{BE} = 10k (Volts)	Emitter Current (mA)	Collector Current (mA)	Peak Emitter Current (mA)	Holding Current (mA)	Power Dissipation (mW)	
				BV_{CBO}	BV_{EBO}	BV_{CER}	I_E	I_C	I_{EM}	I_{Hold}	P_D	h_{FE}
239	TO72	129	PNP	–70	–70	–70	100	50	500	1	250	0.72 to 2.5
			NPN	70	5	70	–100		–500			



SCS CIRCUIT SYMBOL

See Diagrams, beginning on Page 1–91