SILICON UNIJUNCTION TRANSISTOR (UJT)

NTE Type Number	Case Style	Diagram Number	Maximum Ratings				Intrinsic Stand Off Ratio		Interbase Resistance (kΩ)		Valley Point Current (mA)
			RMS Emitter Current (mA)	Interbase Voltage (Volts)	RMS Power Dissipation (mW)	Emitter Reverse Current (μA)					
			I_E	V_{BB}	P_D	I_{EO}			R_{BBO}		I_V
							MIN	MAX	MIN	MAX	
6400	TO39	125	50	35	450	12	0.45	0.80	4	12	8 Min
6400A	TO39	125	50	55	450	1	0.54	0.67	4	12	8 Min
6401	TO18	126	50	35	300	12	0.56	0.75	4.7	9.1	4 Min
6409	TO18	126	50	35	300	0.2	0.68	0.82	4.7	9.1	8 Min
6410	TO92	9k	50	35	300	0.005 Typ	0.70	0.85	4	9.1	4 Min

PROGRAMMABLE UNIJUNCTION TRANSISTOR (PUT)

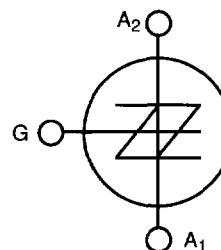| NTE Type Number	Case Style	Diagram Number	Maximum Ratings				Gate Current (mA)	Peak Current @ V_S = 10V (μA)	Offset Voltage @ V_S = 10V (Volts)	Minimum Valley Voltage @ V_S = 10V (μA)
			Gate to Cathode Forward Voltage (Volts)	Gate to Cathode Reverse Voltage (Volts)	Anode to Cathode Voltage (Volts)	Power Dissipation (mW)				
			BV_{GKF}	BV_{GKR}	BV_{AK}	P_D	I_G	I_P	V_T	I_V
6402	TO98/TO92	127a/9g	+40	−5	±40	300	±20	2 @ R_S = 1MΩ	1.6 @ R_g = 1MΩ	70 @ R_g = 1MΩ
								5 @ R_S = 10kΩ	0.6 @ R_g = 10kΩ	1.5mA @ R_g = 10kΩ

DESCRIPTION:

This device has been characterized as a Programmable Unijunction Transistor (PUT), offering many advantages over conventional unijunction transistors. The designer can select R_1 and R_2 to program unijunction characteristics such as η, R_{BB}, I_P, and I_V to meet particular needs. Applications of the PUT include timers, high gain phase control circuits, and relaxation oscillators.

SILICON BILATERAL SWITCH (SBS)

NTE Type Number	Case Style	Diagram Number	Maximum Ratings							
			Peak Recurrent Forward Current (Amps)	DC Forward Anode Current (mA)	Power Dissipation (mW)	Switching Voltage (Volts)	Switching Current (μA)	Holding Current (mA)	Off–State Current @ 5V (μA)	On–State Forward Voltage Drop I_F = 175mA (Volts)
			I_{Fp}	I_F	P_D	V_S	I_S	I_{Hold}	I_B	V_F
6403	TO92/TO98	9h/127b	1	175	300	6 Min 10 Max	500	1.5	1	1.7

DESCRIPTION:

Silicon Bilateral Switches are specifically designed and characterized for applications where stability of switching voltage over a wide temperature range and well matched bilateral characteristics are an asset. They are ideally suited for half wave and full wave triggering in low voltage SCR and TRIAC phase control circuits.

SBS CIRCUIT SYMBOL