SPECIALIZED THYRISTORS

Diacs—Silicon Bidirectional Trigger Diodes

TCE Type	Maximum Ratings		Operating Characteristics			Outline No
			Breakover/Switching			
	Total Power Dissipatn. P_T W	Peak Pulse Current I_{PULSE} A	Voltage: In Both Directions V_{BR} V	Voltage Symmetry $V_{BR}\pm$ V	Current. In Both Directions I_{BR} µA	
SK3523	. . . .	2.0	28-36	3 8 Max	200	R-001
SK4922	. . . . .	2.0	35-45	3 Max	50 Max	S-048
SK7901	0.15	2.0	28-36	2.5 Max	100	R-001

Bidirectional Diode—Thyristors (SIDAC)

TCE Type	Maximum Ratings				Operating Characteristics							Outline No
	Repetitive Peak Off-State Voltage V_{DRM} V	On-State RMS Current I_T A	Peak Non-Repet. Surge Current I_{TSM} A	Critical Rate of Rise of On-State Current di/dt A/µs	Breakover Voltage V_{BO} V	Breakover Current I_{BO} mA	Holding Current I_H mA	Forward Voltage Drop V_T V	Turn-off Time t_q µs	Switching Resistance R_S kΩ	Color of Marking Band	
SK4920	90	1	20	50	110-125	0.5 Max	50 Typ	1.5 Max	3.5 Typ	0 1 Min	Green	S-046
SK4921	90	1	20	50	104-118	0 5 Max	50 Typ	1 5 Max	3 5 Typ	0.1 Min	Blue	S-046
SK9843	90	1	20	50	85-113	0 5 Max	50 Typ	1.5 Max	3 5 Typ	0 1 Min	Orange	S-046
SK9844	45	1	20	50	55-65	0.5 Max	50 Typ	1 5 Max	3 Typ	0 1 Min	Gold	S-046
SK9846	45	1	20	50	45-60	0.5 Max	50 Typ	1.5 Max	3 Typ	0.1 Min	Red	S-046

Silicon Controlled Switches

TCE Type	Maximum Ratings									Operating Characteristics							Out. No.
		Collector Current		Emitter Current			Breakdown Voltages										
	Total Power Dissipatn. P_T mW	DC Continuous I_C mA	Peak Repetitive Surge $I_{CSRS/CRS}$ mA	DC Continuous I_E mA	Peak Repetitive Surge I_{ERS} A	Peak Non-Repet. Surge I_{ES} A	Coll.-to Emitter (NPN/PNP) $BV_{CER/CEO}$ V	Coll. To Base BV_{CBO} V	Emitter To Base BV_{EBO} V	Fwd. Current Transfer Ratio h_{FE}	Fwd. Voltage Drop V_F V	Trigger Voltage V_{TRIG} V	Trigger Current I_{TRIG} µA	Holding Current I_H mA	Turn-on Time t_{ON} µs	Turn-off Time t_{OFF} µs	
SK4914	200	-10/25	-50/50	50/-50	0.1/-0.1	0.5/-0 5	-70 Min PNP	-70/70 Min	-70/5 Min	0.1/15 Min	1.9 Max NPN	1.1 Max NPN	150 Max NPN	4 0 Max NPN	1.5 Max NPN	8 Max NPN	S-043

Silicon Asymmetrical Switches (SAS)

TCE Type	Maximum Ratings			Operating Characteristics							Outline No.
	Total Power Dissipatn.	DC Forward Current	Peak Repetitive Forward Current	Switching Voltages		Switching Current	Forward On-State Voltages		Turn-on Time	Turn-off Time	
				1	2		1	2			
	P_T mW	I_F mA	$I_{FM(REP)}$ mA	V_{S1} V	V_{S2} V	$I_{S1,2}$ µA	V_{F1} V	V_{F2} V	t_{ON} µs	t_{OFF} µs	
SK9125	350	200	500	14-18	7-9	80	7-10	1.6 Max	1	30	S-030

Silicon Bidirectional Switches (SBS)

TCE Type	Maximum Ratings			Operating Characteristics					Outline No.
	Total Power Dissipatn.	DC Forward Current	Peak Repetitive Forward Current	Switching Voltage	Switching Current	Gate Trigger Current	Holding Current	Forward On-State Voltage	
	P_T mW	I_F mA	$I_{FM(REP)}$ mA	V_S V	I_S µA	I_{GF} µA	I_H mA	V_F V	
SK9120	500	200	2.0	6-10	500 Max	100 Max	1.5 Max	1.7 Max	S-027

Silicon Unidirectional Switches (SUS)

TCE Type	Maximum Ratings			Operating Characteristics						Outline No.
	Total Power Dissipatn.	DC Forward Current	Peak Repetitive Forward Current	Switching Voltage	Switching Current	Holding Current	Forward On-State Voltage	Turn-on Time	Turn-off Time	
	P_T mW	I_F mA	$I_{FM(REP)}$ mA	V_S V	I_S µA	I_H mA	V_F V	t_{ON} µs	t_{OFF} µs	
SK7900	300	175	1000	6-10	500 Max	1.5 Max	1.5 Max	1.0 Max	25.0 Max	S-001

Programmable Unijunction Transistors (PUT)

TCE Type	Maximum Ratings							Operating Characteristics				Outline No.
	Total Power Dissipatn.	Forward Anode Current	Gate Current	Gate-to-Cathode Forward Voltage	Gate-to-Cathode Reverse Voltage	Anode Reverse Voltage	Anode-to-Cathode Voltage	Peak Point Current	Valley Point Current	Offset Voltage	Forward Voltage Drop	
	P_T mW	I_F mA	I_G mA	V_{GKF} V	V_{GKR} V	V_{GAR} V	V_{AK} V	I_P µA	I_V µA	V_T V	V_F V	
SK3628	300	150	50	40	-5.0	40	40	1.25 Typ	18 Typ	0.70 Typ	0.8 Typ	