

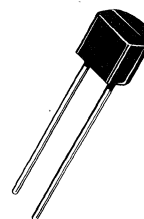
1N5758,A thru 1N5762,A (SILICON)

SILICON 3-LAYER BILATERAL TRIGGERS

... Annular, two terminal devices that exhibit bi-directional negative resistance switching characteristics. These economical, durable devices have been developed for use in thyristor triggering circuits for lamp drivers and universal motor speed controls.

- Switching Voltage Range — 20 to 36 Volts Nominal
- Symmetrical Characteristics
- Passivated Surface for Reliability and Uniformity

SILICON BILATERAL TRIGGERS



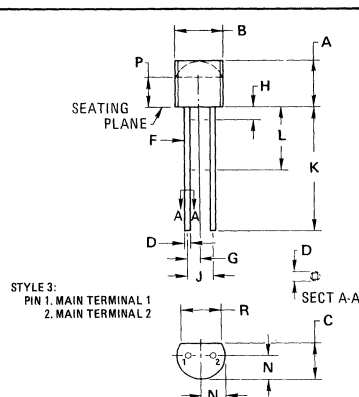
*MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Rating	Symbol	Value	Unit
Peak Pulse Current (30 μs duration, 120 Hz repetition rate)	I_{pulse}	2.0	Amp
Power Dissipation @ $T_A = -40$ to $+25^\circ\text{C}$ Derate above 25°C	P_D	300 4.0	mW mW/ $^\circ\text{C}$
Operating Junction Temperature Range	T_J	-40 to +100	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-40 to +150	$^\circ\text{C}$

*ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
Switching Voltage (Both Directions)	V_S			Volts
1N5758		16	24	
1N5759		20	28	
1N5760		24	32	
1N5761		28	36	
1N5762		32	40	
1N5758A		18	22	
1N5759A		22	26	
1N5760A		26	30	
1N5761A		30	34	
1N5762A		34	38	
Switching Current (Both Directions)	I_S	—	100	μA
($T_A = -40$ to $+75^\circ\text{C}$)		—	25	
Switching Voltage Change (Both Directions)	ΔV	5.0	—	Volts
($\Delta I = I_S$ to $I = 10$ mA)		7.0	—	
Leakage Current (Both Directions), (Applied Voltage = 14 Volts)	I_B	—	10	μA
Switching Voltage Symmetry	$(V_{S+}) - (V_{S-})$	—	± 4.0	Volts
1N5758/5762		—	± 2.0	
1N5758A/5762A		—	± 2.0	
Peak Pulse Amplitude (Figure 1) (Both Polarities)		3.0	—	Volts
1N5758,A,1N5759,A		5.0	—	
1N5760,A,61,A,62,A		—	—	

*Indicates JEDEC Registered Data.



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	4.32	5.33	0.170	0.210
B	4.45	5.21	0.175	0.205
C	3.18	4.19	0.125	0.165
D	0.356	0.533	0.014	0.021
F	0.407	0.482	0.016	0.019
G	1.27	BSC	0.050	BSC
H	—	1.27	—	0.050
J	2.54	BSC	0.100	BSC
K	12.70	—	0.500	—
L	6.35	—	0.250	—
N	2.03	2.66	0.080	0.105
P	2.93	—	0.115	—
R	3.43	—	0.135	—

CASE 182-02

TYPICAL ELECTRICAL CHARACTERISTICS

FIGURE 1 — PEAK PULSE AMPLITUDE TEST CIRCUIT

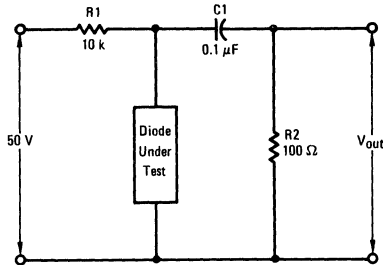


FIGURE 2 — VOLT-AMPERE CHARACTERISTICS

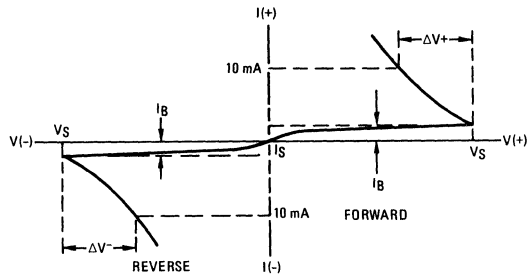


FIGURE 3 — BREAKOVER VOLTAGE BEHAVIOR

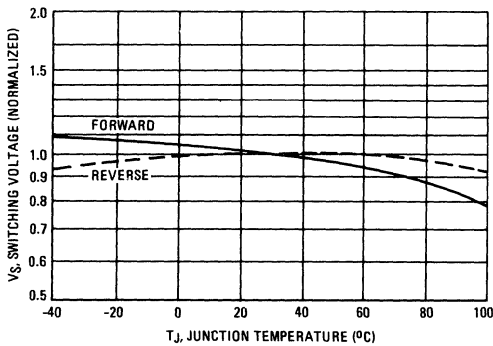


FIGURE 4 — NORMALIZED OUTPUT VOLTAGE BEHAVIOR

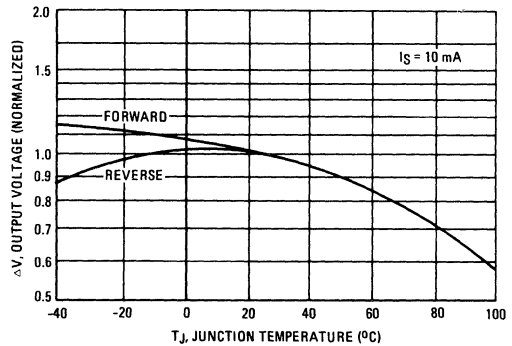


FIGURE 5 — SWITCHING TIMES

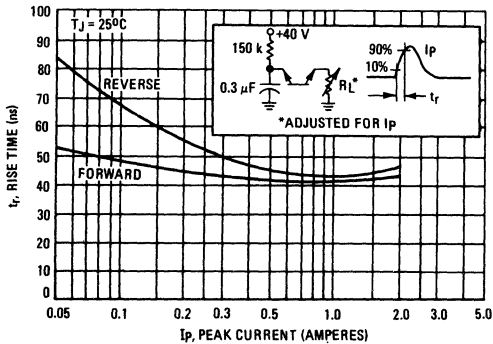


FIGURE 6 — CONTROL CIRCUIT

