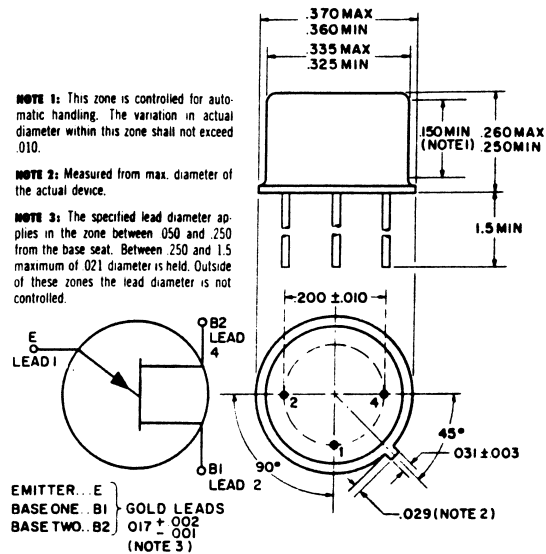




absolute maximum ratings: (25°C)*

Voltages		
Emitter Reverse	60	volts
Interbase	65	volts
Current		
RMS Emitter	70	ma
Peak Emitter	2	amperes†
Power		
Dissipation	600	mw**
Temperatures		
Operating	-65 to +175	°C
Storage	-65 to +175	°C

†Capacitor discharge—10 μfd or less, 30 volts or less.
**Derate 3.9 mw/°C increase in ambient temperature. The total power dissipation (available power to Emitter and Base-Two) must be limited by the external circuitry.



electrical characteristics: (25°C)

	2N490C		2N492C		2N494C			
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.		
Intrinsic Standoff Ratio ($V_{BB} = 10V$)	η	.51 .62	.56 .68	.62 .75				
Interbase Resistance ($V_{BB} = 3V, I_E = 0$)	R_{BBO}	6.2 9.1	6.2 9.1	6.2 9.1			K Ω	
Emitter Saturation Voltage ($V_{BB} = 10V, I_E = 50$ ma)	$V_{E(SAT)}$	4		4.3	4.6		volts	
Modulated Interbase Current ($V_{BB} = 10V, I_E = 50$ ma)	$I_{B2(MOD)}$	6.8 22	6.8 22	6.8 22	22		ma	
Emitter Reverse Current ($V_{B2E} = 30V, I_{B1} = 0$)	I_{EO}	0.02		0.02		0.02		μa
Emitter Reverse Current ($V_{BB} = 25V, V_{EB1} = V_P - .3V$) (Fig. 2)	I_{EX}	0.05		0.05		0.05		μa
Peak Point Emitter Current ($V_{BB} = 25V$)	I_P	2		2		2		μa
Valley Point Current ($V_{BB} = 20V, R_{B2} = 100\Omega$)	I_V	8.0	8.0	8.0	8.0		ma	
Base-One Peak Pulse Voltage‡	V_{OB1}	3.0	3.0	3.0	3.0		volts	

‡The base-one peak pulse voltage is measured in Figure 1 below. This specification is used to ensure a minimum pulse amplitude for applications in SCR firing circuits and other types of pulse circuits.

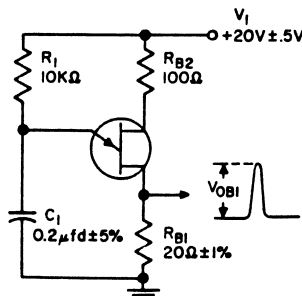


Figure 1

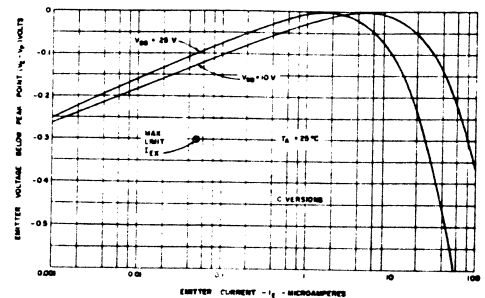


Figure 2

