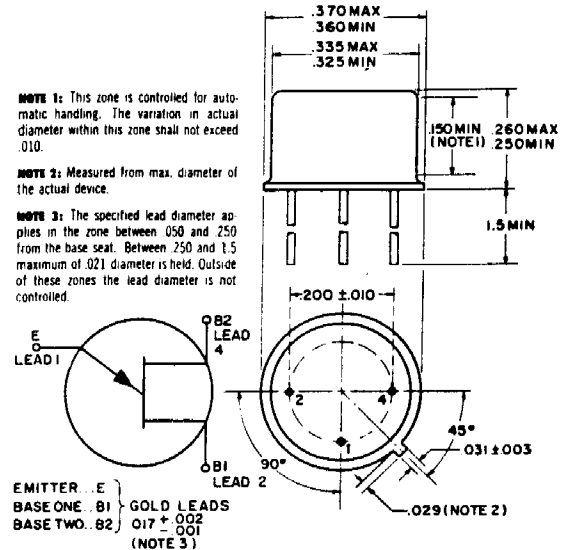




absolute maximum ratings: (25°C)\*

<b>Voltages</b>			
Emitter Reverse	60	volts	
Interbase	65	volts	
<b>Current</b>			
RMS Emitter	70	ma	
Peak Emitter	2	amperes†	
<b>Power</b>			
Dissipation	600	mw**	
<b>Temperatures</b>			
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 ( $V_{BB} = 10V$ )	$\eta$	.51 .62	.56 .68	.62 .75			
Interbase Resistance ( $V_{BB} = 3V, I_E = 0$ )	$R_{BB0}$	6.2 9.1	6.2 9.1	6.2 9.1			K $\Omega$
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			ma
Emitter Reverse Current ( $V_{B2E} = 30V, I_{B1} = 0$ )	$I_{E0}$		0.02	0.02	0.02		μa
Emitter Reverse Current ( $V_{BB} = 25V, V_{E,B1} = V_P - .3V$ ) (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			ma
Base-One Peak Pulse Voltage†	$V_{OB1}$	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.

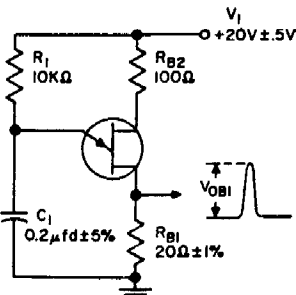


Figure 1

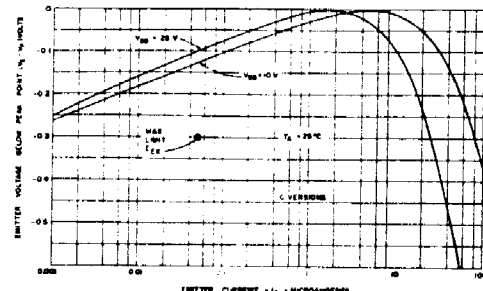


Figure 2

