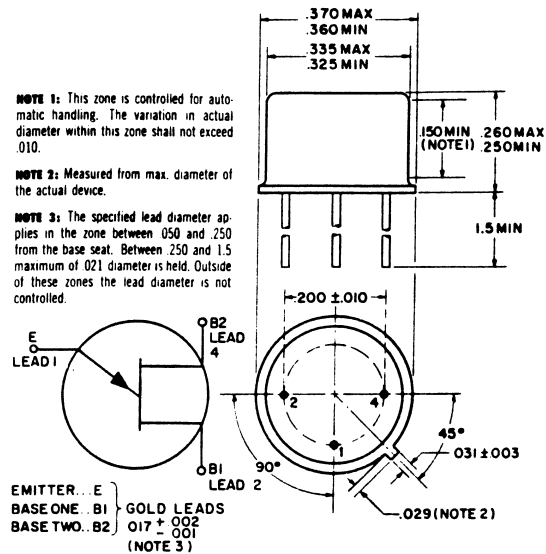




absolute maximum ratings: (25°C)*

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)

- Intrinsic Standoff Ratio ($V_{BB} = 10V$)
- Interbase Resistance ($V_{BB} = 3V, I_E = 0$)
- Emitter Saturation Voltage ($V_{BB} = 10V, I_E = 50 \text{ ma}$)
- Modulated Interbase Current ($V_{BB} = 10V, I_E = 50 \text{ ma}$)
- Emitter Reverse Current ($V_{B2E} = 30V, I_{B1} = 0$)
- Emitter Reverse Current ($V_{BB} = 25V, V_{EB1} = V_P - .3V$) (Fig. 2)
- Peak Point Emitter Current ($V_{BB} = 25V$)
- Valley Point Current ($V_{BB} = 20V, R_{B2} = 100\Omega$)
- Base-One Peak Pulse Voltage‡

	2N490C		2N492C		2N494C		
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	
η	.51	.62	.56	.68	.62	.75	
R_{BBO}	6.2	9.1	6.2	9.1	6.2	9.1	K Ω
$V_{E(SAT)}$	4		4.3		4.6		volts
$I_{B2(MOD)}$	6.8	22	6.8	22	6.8	22	ma
I_{EO}	0.02		0.02		0.02		μa
I_{EX}	0.05		0.05		0.05		μa
I_P	2		2		2		μa
I_V	8.0		8.0		8.0		ma
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.

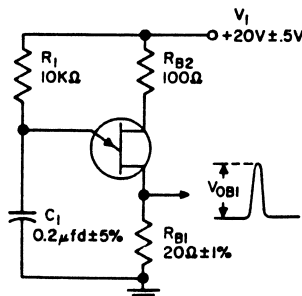


Figure 1

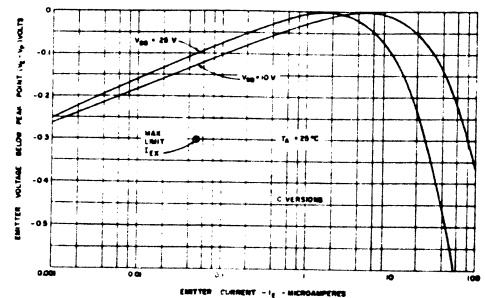


Figure 2

