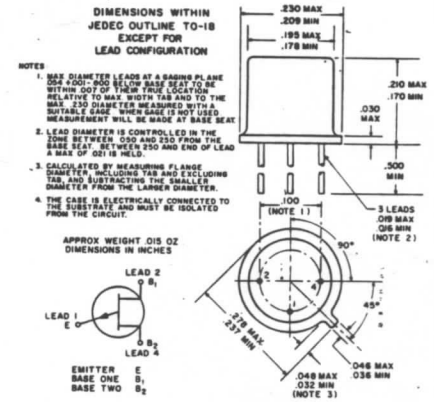


D5K2

Complementary Unijunction Transistor

absolute maximum ratings: (25° C free air)

	D5K2	
Voltage		
Interbase Voltage	20	V
Current		
Average Emitter (Forward)	150	mA
Peak Emitter (Forward) (Note 1)	2	A
Peak Reverse Emitter	15	mA
Power		
Average Total	200	mW
Temperature		
Operating	- 55 to + 100 °C	
Storage	- 55 to + 150 °C	



electrical characteristics: (25° C free air)

		Min.	Typ.	Max.	
Intrinsic Standoff Ratio	η	0.58	0.60	0.62	
Peak Point Voltage					
($V_{BB} = 5V$)	V_P	3.2	3.45	3.7	Volts
($V_{BB} = 10V$)	V_P	6.1	6.45	6.8	Volts
Interbase Resistance					
($I_{BB} = 0.1mA$)	R_{BBO}	5	8	15	kohms
Emitter Breakdown Voltage					
($I_{EB1} = 10\mu A$)	V_{EB10}	8.0	9.5		Volts
Peak Point Current					
($V_{BB} = 10V$)	I_P			15	μA
Valley Point Current					
($V_{BB} = 10V$)	I_V	1	2		mA
Emitter Reverse Current					
($V_{EB1} = 5V$)	I_{EB10}		0.1	10	nA
Emitter Saturation Voltage					
($I_E = 50mA, V_{BB} = 10V$)	$V_{E(sat)}$		1.1	1.5	Volts
Modulated Interbase Current					
($I_E = 50mA, V_{BB} = 10V$)	$I_{B2(mod)}$		4	10	mA
Peak Pulse Voltage					
(Note 4)	V_{OUT}	3.5	4.5		Volts
Diode Voltage Drop					
(Note 3)	V_D	.30	.45	.60	Volts
Minimum Charge to Trigger					
($V_{BB} = 10V$)	Q_t		50		pC
Turn-on Time (See Figure 7)	t_{on}			1	$\mu sec.$
Recovery Time (See Figure 7)	t_{rec}			10	$\mu sec.$
Relaxation Oscillator Frequency Shift from 25°C Value (See Figure 1, $C = 0.1\mu F, R_{B2} = 1k\Omega, V_s = 12.5V$)					
- 15°C to + 65°C			0.3	1.0	%
- 55°C to + 100°C			0.5	2.0	%



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