

PHYSICAL DIMENSIONS

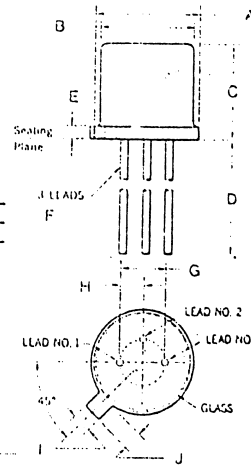
ABSOLUTE MAXIMUM RATINGS (Note 1)

Maximum Temperatures		
Storage Temperature		-65°C to +200°C
Operating Junction Temperature		200°C

Maximum Power Dissipation (Notes 2 & 3)		
Total Dissipation at 25°C Ambient Temperature		0.36 mW
at 25°C Case Temperature		1.2 W

Maximum Voltages and Current		
V _{CEO}	Collector to Emitter Voltage	40 V
V _{CBO}	Collector to Base Voltage	60 V
V _{EBO}	Emitter to Base Voltage	6.0 V
I _C	Collector Current	200 mA

DIM.	INCHES			MILLIMETERS		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A	.209		.230	5.31		5.84
B	.178		.195	4.52		4.95
C	.170		.210	4.32		5.33
D	.500			12.70		
E			.030			0.762
F	.016		.019	0.406		0.483
G		.100			2.54	
H		.050			1.27	
I	.036		.046	0.914		1.17
J	.028		.043	0.711		1.22



NOTES: See table for dimensions in inches and millimeters.
Leads are gold-plated kovar.
Lead No. 3 connected to case.
Package weight is 0.44 grams.

ELECTRICAL CHARACTERISTICS (25°C Ambient Temperature unless otherwise noted)

SYMBOL	CHARACTERISTIC	MIN. MAX.		UNITS	TEST CONDITIONS
BV _{CBO}	Collector to Base Breakdown Voltage	60		V	I _C = 10 μA, I _E = 0
BV _{CEO}	Collector to Emitter Breakdown Voltage (Note 4)	40		V	I _C = 10 mA, I _B = 0
BV _{EBO}	Emitter to Base Breakdown Voltage	6.0		V	I _E = 10 μA, I _C = 0
I _{CEX}	Collector Cutoff Current		10	nA	V _{CE} = 40 V, V _{EB} = 3.0 V
			15	μA	V _{CE} = 40 V, V _{EB} = 3.0 V, T _A = 150°C
I _{BL}	Base Cutoff Current		25	nA	V _{CE} = 40 V, V _{EB} = 3.0 V
h _{FE}	DC Current Gain (Note 4)	30			I _C = 0.1 mA, V _{CE} = 1.0 V
		45			I _C = 1.0 mA, V _{CE} = 1.0 V
		50	150		I _C = 10 mA, V _{CE} = 1.0 V
		20			I _C = 50 mA, V _{CE} = 1.0 V
V _{CE(sat)}	Collector to Emitter Saturation Voltage (Note 4)		0.2	V	I _C = 10 mA, I _B = 1.0 mA
			0.3	V	I _C = 50 mA, I _B = 5.0 mA
V _{BE(sat)}	Base to Emitter Saturation Voltage (Note 4)	0.6	0.9	V	I _C = 10 mA, I _B = 1.0 mA
			1.0	V	I _C = 50 mA, I _B = 5.0 mA
h _{fe}	Current Gain Bandwidth Product	2.5			I _C = 10 mA, V _{CE} = 20 V, f = 100 MHz
C _{ob}	Output Capacitance		4.0	pF	I _E = 0, V _{CB} = 10 V, f = 100 kHz
C _{ib}	Input Capacitance		6.0	pF	V _{EB} = 1.0 V, I _C = 0, f = 100 kHz
h _{ie}	Input Impedance	0.5	6.0	kΩ	I _C = 1.0 mA, V _{CE} = 10 V, f = 1.0 kHz
h _{re}	Voltage Feedback Ratio		10	x10 ⁻⁴	I _C = 1.0 mA, V _{CE} = 10 V, f = 1.0 kHz
h _{fc}	Small Signal Current Gain	50	250		I _C = 1.0 mA, V _{CE} = 10 V, f = 1.0 kHz
h _{oc}	Output Admittance	1.0	30	μmhos	I _C = 1.0 mA, V _{CE} = 10 V, f = 1.0 kHz
NF	Noise Figure		5.0	dB	I _C = 100 μA, V _{CE} = 5.0 V, R _G = 1.0 kΩ f = 10 Hz to 15.7 kHz

