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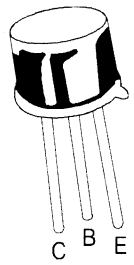
PNP SILICON PLANAR TRANSISTOR

BSS44

TO-39
Metal Can Package



ABSOLUTE MAXIMUM RATINGS

DESCRIPTION		SYMBOL	VALUE	UNIT
Collector Base Voltage		V_{CBO}	65	V
Collector Emitter Voltage		V_{CEO}	60	V
Emitter Base Voltage		V_{EBO}	6	V
Collector Current		I_C	5	A
Total Power Dissipation	$T_c \leq 25°C$	P_D	5	W
	$T_a \leq 25°C$		0.87	W
Operating and Storage Junction Temperature Range		T_j, T_{stg}	- 65 to +200	°C

THERMAL RESISTANCE

Junction to Case	$R_{th\ (j-c)}$	35	°C/W
Junction to Ambient in free air	$R_{th\ (j-a)}$	200	°C/W

ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Cut Off Current	I_{CES}	V_{CB}=60V, V_{BE}=0			0.5	uA
Collector Base Breakdown Voltage	$V_{CBO(BR)}$	I_C=1mA, I_E=0	65			V
Collector Emitter Sustaining Voltage	$V_{CEO(SUS)}$	I_C=50mA, I_B=0	60			V
Emitter Base Voltage	V_{EBO}	I_E=100uA, I_C=0	6			V
Collector Emitter Saturation Voltage	*$V_{CE\ (sat)}$	I_C=0.5A, I_B=50mA		0.1		V
		I_C=5A, I_B=0.5A		0.4	1	
Base Emitter Saturation Voltage	*$V_{BE\ (sat)}$	I_C=0.5A, I_B=50mA		0.8		V
		I_C=5A, I_B=0.5A		1.1	1.6	
DC Current Gain	*h_{FE}	I_C=0.5A, V_{CE}=2V	30			
		I_C=2A, V_{CE}=2V	40	70		
		I_C=5A, V_{CE}=2V		45		
Transition Frequency	f_T	I_C=0.5A, V_{CE}=5V		80		MHz
Collector-base Capacitance	C_{CBO}	I_E=0, V_{CB}=10V, f=1MHz			100	pF

***Pulse Test: Pulse Width = 300μs, Duty Cycle ≤ 1.5%**

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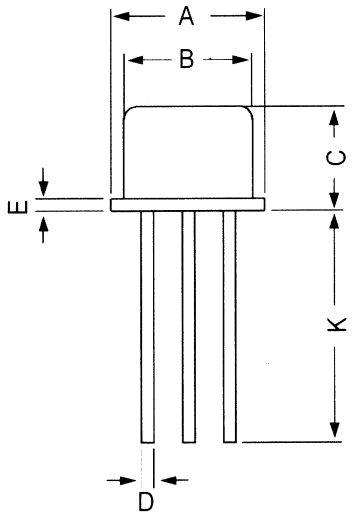
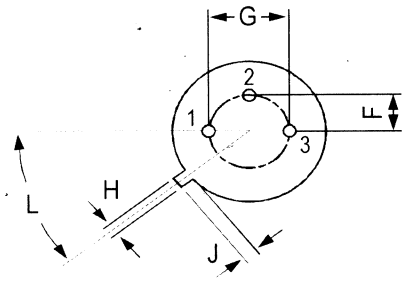
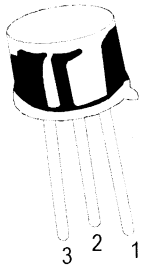




All dimensions are in mm

DIM	MIN	MAX
A	8.50	9.39
B	7.74	8.50
C	6.09	6.60
D	0.40	0.53
E	—	0.88
F	2.41	2.66
G	4.82	5.33
H	0.71	0.86
J	0.73	1.02
K	12.70	—
L	42 DEG	48 DEG



PIN CONFIGURATION
1. EMITTER
2. BASE
3. COLLECTOR