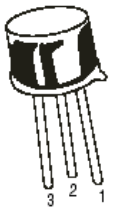
Medium Power Transistor



Pin Configuration
1. Emitter
2. Base
3. Collector

Features:

- High performance, low frequency devices typically with current ratings 2A. Up to 1W power dissipation
- PNP Epitaxial Planar Silicon Transistors

Absolute Maximum Ratings:

(T_a = 25°C unless otherwise specified)

Characteristic	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	350	V
Collector-Emitter Voltage	$V_{CEO\ (sus)}$	300	
Collector-Emitter Voltage R_{BE} = 100Ω	V_{CER}		
Emitter-Base Voltage	V_{EBO}	6	
Collector Peak Current	I_{CM}	1	A
Base Current	I_B	0.5	
Power Dissipation at T_a = 25°C at T_C 25°C	P_{tot}	1 10	W
Operating Storage Temperature Range	T_J, T_{stg}	-65 to +200	°C

Thermal Resistance

Junction to Ambient	$R_{th(j-a)}$	17.5	°C/W
Junction to Case	$R_{th(j-c)}$		

Medium Power Transistor

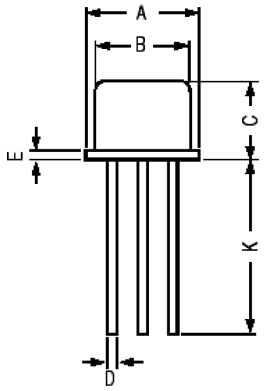
Electrical Characteristics:

(T_a = +25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Max.	Unit
Collector-Cut off Current R_{BE} = 100Ω	I_{CBO}	V_{CB} = 40V, I_E = 0	-	100	nA
	I_{CER}	V_{CE} = 70V		10	µA
Collector-Emitter Voltage	V_{CEO}*	I_C = 10mA, I_B = 0	60	-	V
Emitter-Base Voltage	V_{EBO}	I_E = 100µA, I_C = 0	5		
DC Current Gain	h_{FE}*	I_C = 500mA, V_{CE} = 4V	40	250	-
Collector Emitter Saturation Voltage	$V_{CE(Sat)}$*	I_C = 1,000mA, I_B = 100mA	-	1	V
Base Emitter Saturation Voltage	$V_{BE(sat)}$*	I_C = 1A, I_B = 100mA		1.5	
Transition Frequency	f_t	I_C = 50mA, V_{CE} = 4V, f = 1MHz	50	-	MHz

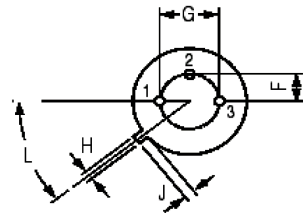
*Pulse : Pulse Duration = 300µs, Duty Cycle = 1%

TO-39 Metal Can Package



Dim.	Min.	Max.
A	8.5	9.39
B	7.74	8.5
C	6.09	6.6
D	0.4	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	12.7	-
L	42°	48°

Dimensions : Millimetres



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Part Number Table

Description	Part Number
Transistor, PNP, TO-39	BC461