

2N4036

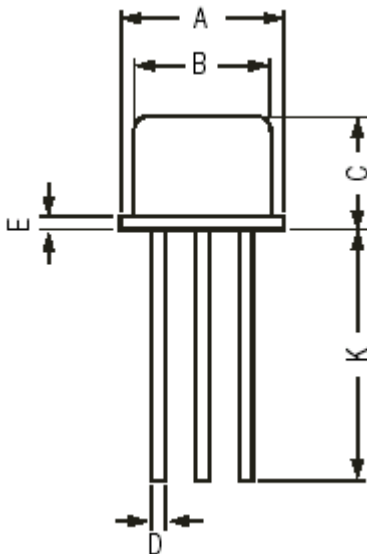
General Purpose Transistors, TO-39, PNP



Features:

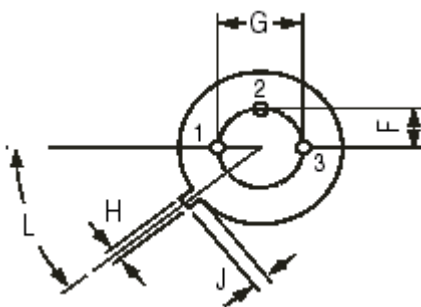
- High performance, low frequency devices typically with current ratings 1A . Up to 1W power dissipation.
- PNP Silicon Planar Transistor.

TO-39 Metal Can Package



Dimensions	Minimum	Maximum
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°	48°

Dimensions : Millimetres



Pin Configuration

1. Emitter
2. Base
3. Collector

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Absolute Maximum Ratings

Description	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	65	V
Collector-Base Voltage	V_{CBO}	90	
Emitter Base Voltage	V_{EBO}	7.0	
Base Current	I_B	0.5	A
Collector Current-Continuous	I_C	1.0	
Power Dissipation at $T_C = 25^\circ\text{C}$ Linear Derating Factor	P_D	5.0 28.6	W mW/°C
Power Dissipation at $T_a = 25^\circ\text{C}$ Linear Derating Factor		1.0 5.72	
Operating and Storage Junction Temperature Range	T_j, T_{stg}	-65 to +200	°C
Lead Temperature 1/16" from Case for 10 Seconds	T_L	230	
Thermal Resistance			
Junction to Case	$R_{th(j-c)}$	35	°C/W

Electrical Characteristics ($T_a = 25^\circ\text{C}$ unless otherwise specified)

Description	Symbol	Test Condition	Minimum	Maximum	Units
Collector-Emitter Voltage	V_{CEO}	$I_C = 10\text{mA}, I_B = 0$	65	-	V
Collector-Base Voltage	V_{CBO}	$I_C = 100\mu\text{A}, I_E = 0$	90	-	
Collector Cut off Current	I_{CEX} I_{CBO}	$V_{CE} = 85\text{V}, V_{BE} = 1.5\text{V}$ $V_{CB} = 90\text{V}, I_E = 0$	-	0.1 1.0	mA μA
Emitter Cut off Current	I_{EBO}	$V_{BE} = 7\text{V}, I_C = 0$	-	10	μA
DC Current Gain	h_{FE}	0.1mA, $V_{CE} = 10\text{V}$ $I_C = 150\text{mA}, V_{CE} = 2\text{V}$ $I_C = 150\text{mA}, V_{CE} = 10\text{V}$ $I_C = 500\text{mA}, V_{CE} = 10\text{V}$	20 20 40 20	- 200 140 -	-
Collector-Emitter _(Sat) Voltage	$V_{CE(Sat)}$	$I_C = 150\text{mA}, I_B = 15\text{mA}$	-	0.65	V
Base-Emitter _(Sat) Voltage	$V_{BE(Sat)}$		-	1.4	
Small-Signal Characteristics					
Current Gain-High Frequency	$ h_{fe} $	$I_C = 50\text{mA}, V_{CE} = 10\text{V},$ $f = 20\text{MHZ}$	3.0	-	-

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Electrical Characteristics ($T_a = 25^\circ\text{C}$ unless otherwise specified)

Description	Symbol	Test Condition	Minimum	Maximum	Units
Switching Characteristics					
Rise Time	t_r	$I_{B1} = 15\text{mA}$, $I_C = 150\text{mA}$, $V_{CE} = 30\text{V}$	-	70	ns
Storage Time	t_s	$I_{B2} = 15\text{mA}$, $I_C = 150\text{mA}$, $V_{CE} = 30\text{V}$	-	600	
Fall Time	t_f		-	100	
Turn-On Time	t_{on}	$I_C = 150\text{mA}$, $V_{CE} = 30\text{V}$, $I_{B1} = I_{B2} = 15\text{mA}$	-	110	
Turn-Off Time	t_{off}		-	700	

Specifications

V_{CEO} maximum (V)	I_C maximum (A)	h_{FE} minimum at $I_C = 150\text{mA}$	$V_{CE(sat)}$ maximum (V) at $I_C = 150\text{mA}$	Package and Pin Out	Type	Part Number
65	1	40	0.65	TO-39	PNP	2N4036

Order Multiple = 5

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Notes:

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