

TIP41/41A/41B/41C TRANSISTOR (NPN)

FEATURES

Medium Power Linear Switching Applications

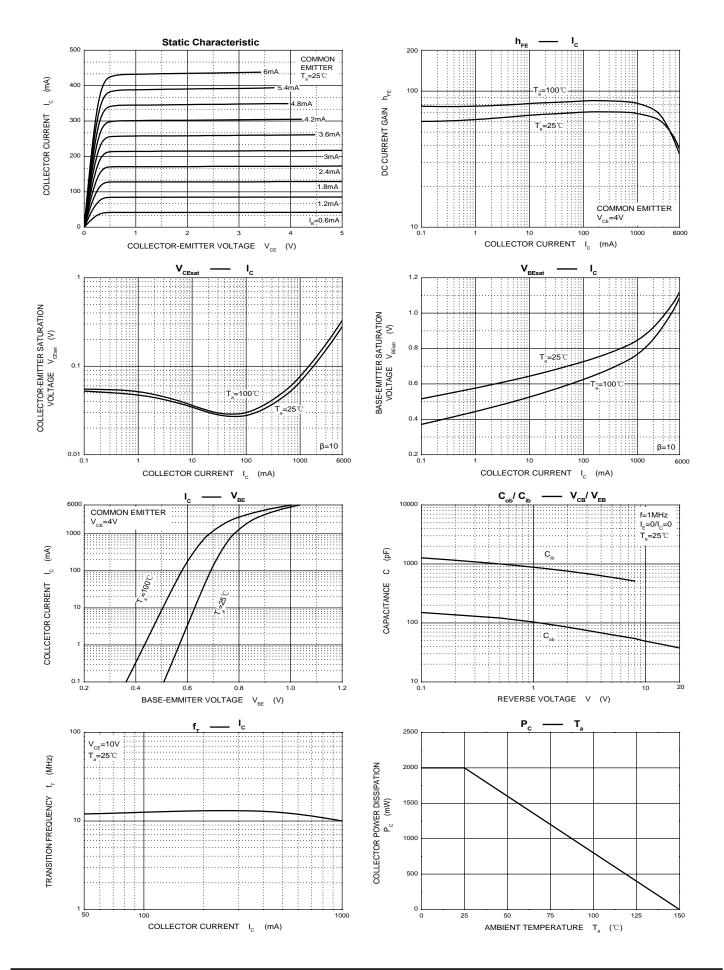
TO-220-3L 1. BASE 2. COLLECTOR 3. EMITTER 12 3

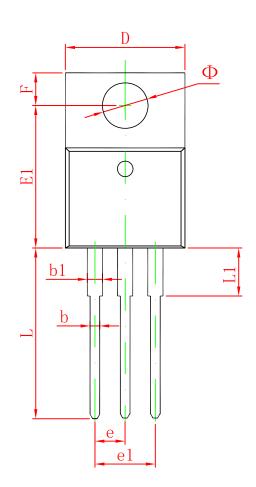
MAXIMUM RATINGS (Ta=25℃ unless otherwise noted)

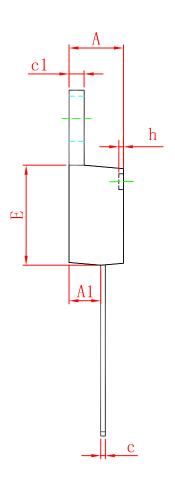
Symbol	Parameter	TIP41	TIP41A	TIP41B	TIP41C	Unit
V _{CBO}	Collector-Base Voltage	40	60	80	100	V
V _{CEO}	Collector-Emitter Voltage	40	60	80	100	V
V _{EBO}	Emitter-Base Voltage	5				V
Ic	Collector Current -Continuous	6				Α
Pc	Collector Power Dissipation	2			W	
R _{OJA}	Thermal Resistance From Junction To Ambient	62.5				°C/W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150			℃	

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

Parameter		Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage TIP41 TIP41A TIP41B TIP41C				40		
		V _{(BR)CBO}	I _C = 1mA, I _E =0	60		V
				80		
				100		
Collector-emitter breakdown voltage TIP41 TIP41A TIP41B		V _{CEO(sus)}	I _C = 30mA, I _B =0	40		V
				60		
				80		
	TIP41C			100		
Emitter-base breakdown voltage		$V_{(BR)EBO} \\$	I _E = 1mA, I _C =0	5		V
Collector cut-off current	TIP41 TIP41A TIP41B TIP41C	І _{СВО}	V _{CB} =40V, I _E =0 V _{CB} =60V, I _E =0 V _{CB} =80V, I _E =0 V _{CB} =100V, I _E =0		0.4	mA
	IP41/41A P41B/41C	I _{CEO}	V _{CE} = 30V, I _B = 0 V _{CE} = 60V, I _B = 0		0.7	mA
Emitter cut-off current		I _{EBO}	V_{EB} =5V, I_{C} =0		1	mA
DC current gain		h _{FE(1)}	V _{CE} = 4V, I _C = 0.3A	30		
		h _{FE(2)}	V _{CE} =4 V, I _C = 3A	15	75	
Collector-emitter saturation voltage		V _{CE(sat)}	I _C =6A, I _B =0.6A		1.5	V
Base-emitter voltage		V _{BE(on)}	V _{CE} = 4V, I _C =6A		2	V
Transition frequency		f⊤	V _{CE} =10V , I _C =0.5A f=1MHz	3		MH_Z







Cumbal	Dimensions	In Millimeters	Dimensions In Inches		
Symbol	Min	Max	Min	Max	
Α	4.470	4.670	0.176	0.184	
A1	2.520	2.820	0.099	0.111	
b	0.710	0.910	0.028	0.036	
b1	1.170	1.370	0.046	0.054	
С	0.310	0.530	0.012	0.021	
c1	1.170	1.370	0.046	0.054	
D	10.010	10.310	0.394	0.406	
E	8.500	8.900	0.335	0.350	
E1	12.060	12.460	0.475	0.491	
е	2.540 TYP		0.100 TYP		
e1	4.980	5.180	0.196	0.204	
F	2.590	2.890	0.102	0.114	
h	0.000	0.300	0.000	0.012	
L	13.400	13.800	0.528	0.543	
L1	3.560	3.960	0.140	0.156	
Ф	3.735	3.935	0.147	0.155	