

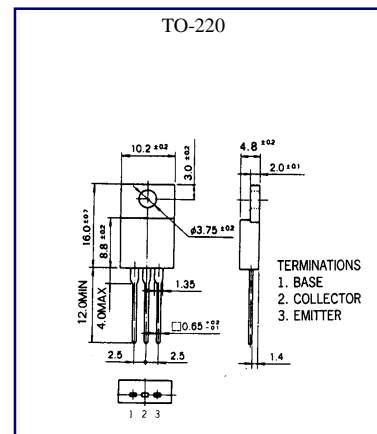


TIP41 SERIES (TIP41/41A/41B/41C)

NPN EPITAXIAL SILICON TRANSISTOR

MEDIUM POWER LINEAR SWITCHING APPLICATIONS

•Complementary to TIP42/42A/42B/42C



ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage :TIP41	V _{CB0}	40	V
:TIP41A		60	V
:TIP41B		80	V
:TIP41C		100	V
Collector-Emitter Voltage :TIP41	V _{CE0}	40	V
:TIP41A		60	V
:TIP41B		80	V
:TIP41C		100	V
Emitter-Base voltage	V _{EB0}	5	V
Collector Current (DC)	I _C	6	A
Collector Current (Pulse)	I _C	10	A
Base Current (DC)	I _B	2	A
Collector Dissipation (T _c =25°C)	P _C	65	W
Junction Temperature	T _j	150	
Storage Temperature	T _{stg}	-50~150	

ELECTRICAL CHARACTERISTICS (Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Emitter Sustaining Voltage	:TIP41 :TIP41A :TIP41B :TIP41C	BV _{CEO(SUS)} I _C =30mA, I _B =0	40			V
			600			V
			80			V
			100			V
Collector Cutoff Current	:TIP41/41A	ICEO	V _{CE} = 30V, I _B =0		0.7	mA
	:TIP41B/41C		V _{CE} = 60V, I _B =0		0.7	mA
Collector Cutoff Current	:TIP41	ICES	V _{CE} = 40V, V _{EB} =		400	μA
	:TIP41A		0		400	μA
	:TIP41B		V _{CE} = 60V, V _{EB} =		400	μA
	:TIP41C		0		400	μA
Emitter Cutoff Current		IEBO	V _{CE} = 80V, V _{EB} =		1	mA
DC Current Gain		hFE	0	30		
			V _{CE} = 100V, V _{EB} =	15	75	
Collector- Emitter Saturation Voltage		V _{CE(sat)}	0		1.5	V
Base- Emitter On Voltage		V _{BE(on)}	V _{EB} = 5V, I _C =0		2.0	V
Current Gain Bandwith Product		f _T	V _{CE} = 4V, I _C =0.3A	3.0		MHZ
			V _{CE} = 4V, I _C =3A			
			I _C =6A, I _B =600mA			
			V _{CE} = 4V, I _C =6A			
			V _{CE} = 10V, I _C =500mA			
			f=1MHZ			