

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

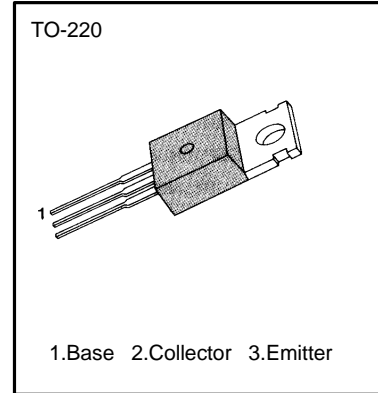
NPN EPITAXIAL SILICON TRANSISTOR

MEDIUM POWER LINEAR SWITCHING APPLICATIONS

• Complement to TIP42/42A/42B/42C

ABSOLUTE MAXIMUM RATINGS

Characteristic	Symbol	Rating	Unit	
Collector Base Voltage	V _{CBO}	TIP41	40	V
		TIP41A	60	V
		TIP41B	80	V
		TIP41C	100	V
Collector Emitter Voltage	V _{CEO}	TIP41	40	V
		TIP41A	60	V
		TIP41B	80	V
		TIP41C	100	V
Emitter-Base Voltage	V _{EBO}	5	V	
Collector Current (DC)	I _C	6	A	
Collector Current (Pulse)	I _c	10	A	
Base Current	I _B	2	A	
Collector Dissipation (T _C =25°C)	P _C	65	W	
Collector Dissipation (T _A =25°C)	P _C	2	W	
Junction Temperature	T _J	150	°C	
Storage Temperature	T _{STG}	-65 ~ 150	°C	



ELECTRICAL CHARACTERISTICS (T_C = 25°C)

Characteristic	Symbol	Test Conditions	Min	Max	Unit
*Collector Emitter Sustaining Voltage	BV _{CEO(sus)}	I _C = 30mA, I _B = 0	TIP41	40	V
TIP41A			60	V	
TIP41B			80	V	
TIP41C			100	V	
Collector Cutoff Current	I _{CEO}	V _{CE} = 30V, I _B = 0	TIP41/41A	0.7	mA
TIP41B/41C			0.7	mA	
Collector Cutoff Current	I _{CES}	V _{CE} = 40V, V _{EB} = 0	TIP41	400	μA
TIP41A			400	μA	
TIP41B			400	μA	
TIP41C			400	μA	
Emitter Cutoff Current	I _{EBO}	V _{EB} = 5V, I _C = 0		1	mA
*DC Current Gain	h _{FE}	V _{CE} = 4V, I _C = 0.3A	30		
		V _{CE} = 4V, I _C = 3A	15	75	
*Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C = 6A, I _B = 600mA		1.5	V
*Base-Emitter On Voltage	V _{BE(on)}	V _{CE} = 4V, I _C = 6A		2.0	V
Current Gain Bandwidth Product	f _T	V _{CE} = 10V, I _C = 500mA f = 1MHz	3.0		MHz

* Pulse Test: PW ≤ 300μs, Duty Cycle ≤ 2%

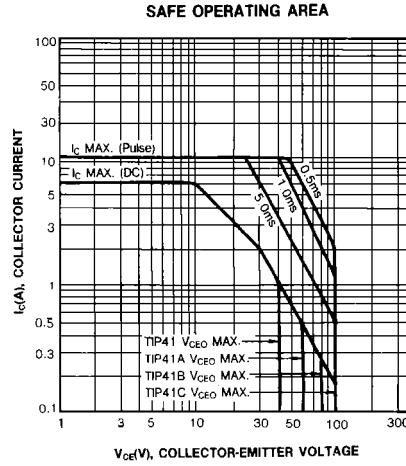
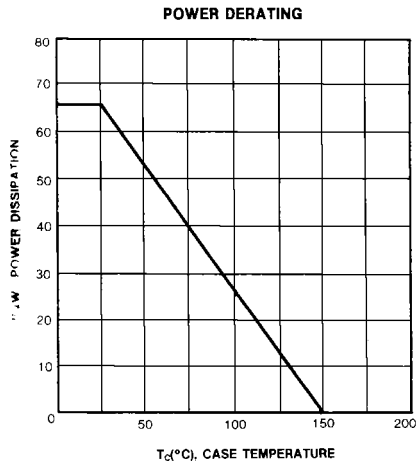
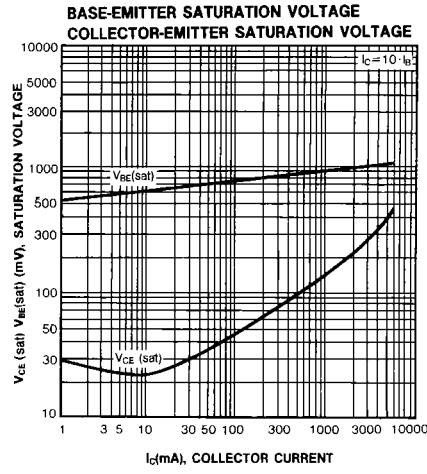
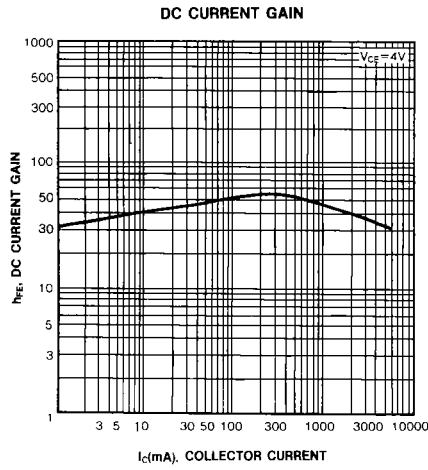
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Rev. B

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