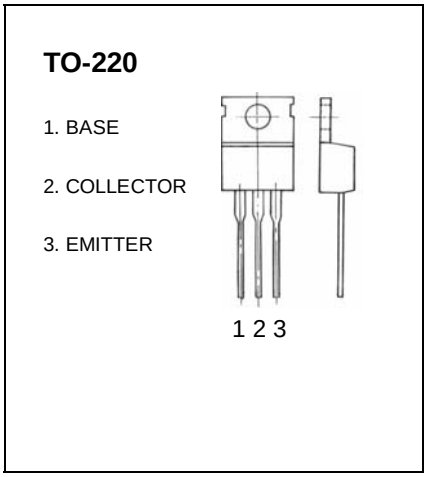
Transys Electronics LIMITED

TO-220 Plastic-Encapsulated Transistors

TIP41A/41B/41C TRANSISTOR (NPN)



FEATURES

Power dissipation

$P_{CM:}$ 2 W (Tamb=25℃)

Collector current

$I_{CM:}$ 6 A

Collector-base voltage

$V_{(BR)CBO}$: TIP41A : 60 V
TIP41B : 80 V
TIP41C : 100 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to +150℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter		Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	41A 41B 41C	$V_{(BR)CBO}$	Ic= 1mA, I_E=0	60 80 100		V
Collector-emitter breakdown voltage	41A 41B 41C	$V_{(BR)CEO}$	Ic= 30mA, I_B=0	60 80 100		V
Emitter-base breakdown voltage		$V_{(BR)EBO}$	I_E= 1mA, I_C=0	5		V
Collector cut-off current	41A 41B 41C	I_{CBO}	V_{CB}=60V, I_E=0 V_{CB}=80V, I_E=0 V_{CB}=100V, I_E=0		0.4	mA
Collector cut-off current	41A 41B 41C	I_{CEO}	V_{CE}= 30V, I_B= 0 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_T	V_{CE}=10V , I_C=0.5A f =1MHz	3		MHz