



TO-220 Plastic-Encapsulate Transistors

TIP41A/41B/41C TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM} : 2 W ($T_{amb}=25^{\circ}C$)

Collector current

I_{CM} : 6 A

Collector-base voltage

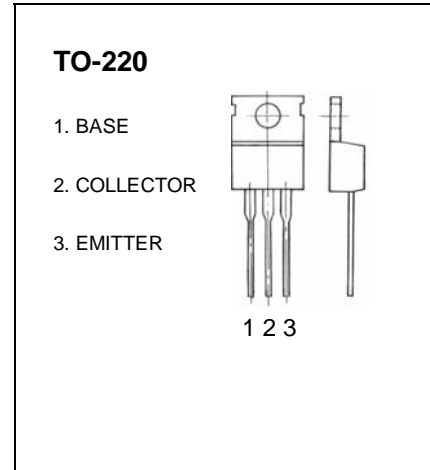
$V_{(BR)CBO}$: TIP41A : 60 V

TIP41B : 80 V

TIP41C : 100 V

Operating and storage junction temperature range

T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	41A	$I_C=1mA, I_E=0$	60		V
	41B		80		
	41C		100		
Collector-emitter breakdown voltage	41A	$I_C=30mA, I_B=0$	60		V
	41B		80		
	41C		100		
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	5		V
Collector cut-off current	41A	$V_{CB}=60V, I_E=0$ $V_{CB}=80V, I_E=0$ $V_{CB}=100V, I_E=0$		0.4	mA
	41B				
	41C				
Collector cut-off current	41A	$V_{CE}=30V, I_B=0$ $V_{CE}=30V, I_B=0$ $V_{CE}=60V, I_B=0$		0.7	mA
	41B				
	41C				
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		
	$h_{FE(2)}$	$V_{CE}=4V, I_C=3A$	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