



《风光欣》技术资料

TIP42/A/B/C

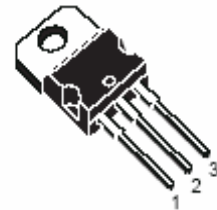
PNP EPITAXIAL SILICON TRANSISTOR

MEDIUM POWER LINEAR SWITCHING APPLICATIONS

*Complement to TIP41/41A/41B/41C

ABSOLUTE MAXIMUM RATINGS($T_A=25$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage:TIP42	V_{CBO}	-40	V
TIP42A		-60	V
TIP42B		-80	V
TIP42C		-100	V
Collector-Emitter Voltage:TIP42	V_{CEO}	-40	V
TIP42A		-60	V
TIP42B		-80	V
TIP42C		-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	
Storage Temperature	T_{STG}	-65 ~150	



TO-220

1.Base 2.Collector 3.Emitter

ELECTRICAL CHARACTERISTICS($T_A=25$)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit	
Collector-Emitter Sustaining Voltage:TIP42	$V_{CE0(SUS)}$	$I_C=-30mA, I_B=0$	-40			V	
TIP42A			-60			V	
TIP42B			-80			V	
TIP42C			-100			V	
Collector Cut-off Current : TIP42/TIP42A	I_{CEO}	$V_{CE}=-30V, I_B=0$			-700	μA	
TIP42B/TIP42C		$V_{CE}=-60V, I_B=0$			-700	μA	
Collector Cut-off Current : TIP42	I_{CES}	$V_{CE}=-40V, V_{EB}=0$			-400	μA	
TIP42A			$V_{CE}=-60V, V_{EB}=0$			-400	
TIP42B			$V_{CE}=-80V, V_{EB}=0$			-400	
TIP42C			$V_{CE}=-100V, V_{EB}=0$			-400	
DC Current Gain	HFE1	$V_{CE}=-4V, I_C=-0.3A$	30				
	HFE2	$V_{CE}=-4V, I_C=-3A$	15		75		
Emitter-Cutoff Current	I_{EBO}	$V_{EB}=-5V, I_C=0$			-1	mA	
Base-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	$V_{CE}=-10V, I_C=-500mA$	3			MHz	