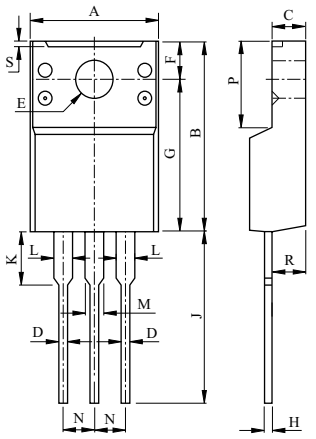
TIP42CF

EPITAXIAL PLANAR PNP TRANSISTOR

GENERAL PURPOSE APPLICATION.

FEATURES

· Complementary to TIP41CF.



DIM	MILLIMETERS
A	10.0±0.3
B	15.0±0.3
C	2.70±0.3
D	0.76+0.09/-0.05
E	Φ3.2±0.2
F	3.0±0.3
G	12.0±0.3
H	0.5+0.1/-0.05
J	13.6±0.5
K	3.7±0.2
L	1.2+0.25/-0.1
M	1.5+0.25/-0.1
N	2.54±0.1
P	6.8±0.1
Q	4.5±0.2
R	2.6±0.2
S	0.5 Typ

TO-220IS

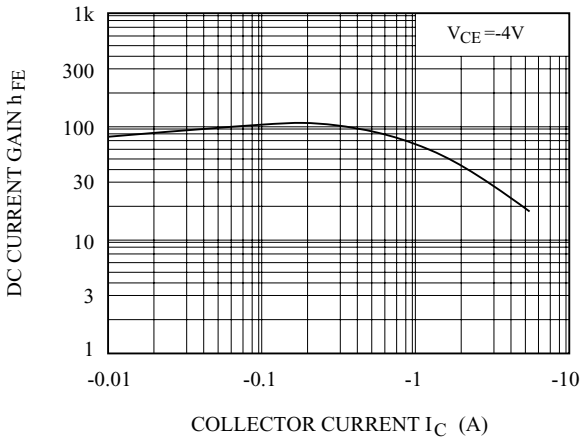
MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-100	V
Collector-Emitter Voltage		V_{CEO}	-100	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current	DC	I_C	-6	A
	Pulse	I_{CP}	-10	
Base Current		I_B	-2	A
Collector Power Dissipation	Ta=25℃	P_C	2	W
	Tc=25℃		25	W
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55～150	℃

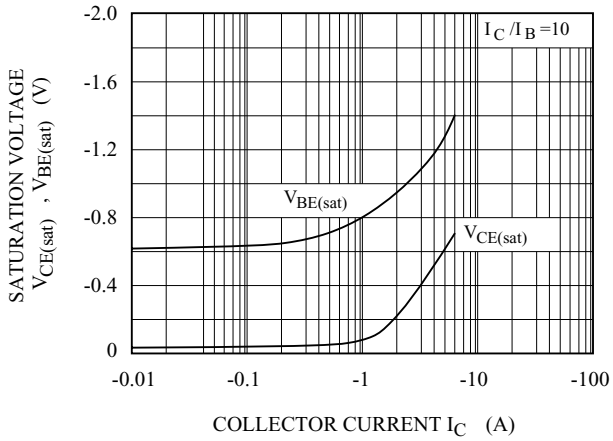
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Emitter Sustaining Voltage	$V_{CEO(SUS)}$	I_C=-30mA, I_B=0	-100	-	-	V
Collector Cut-off Current	I_{CEO}	V_{CE}=-60V, I_B=0	-	-	-0.7	mA
Collector Cut-off Current	I_{CES}	V_{CE}=-100V, V_{EB}=0	-	-	-400	μA
Emitter Cut-off 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
Transition Frequency	f_T	V_{CE}=-10V, I_C=-500mA	3.0	-	-	MHz

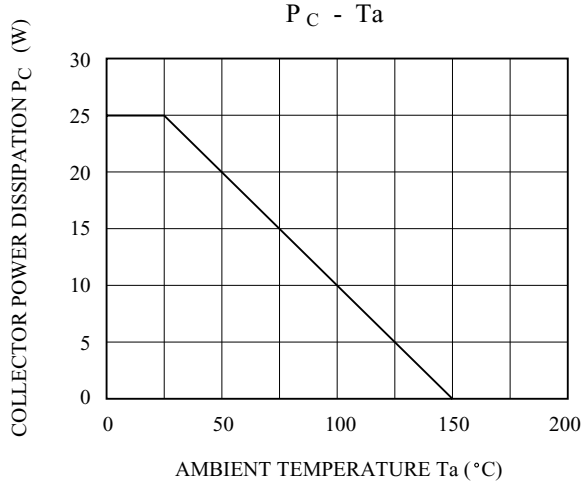
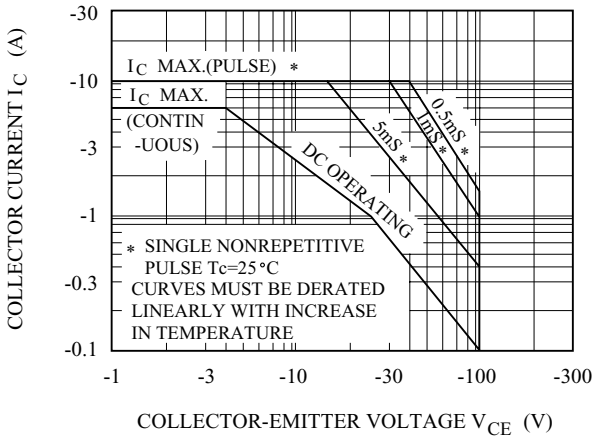
h_{FE} - I_C



$V_{CE(sat)}$,$V_{BE(sat)}$ - I_C



P_C - Ta



SAFE OPERATING AREA