

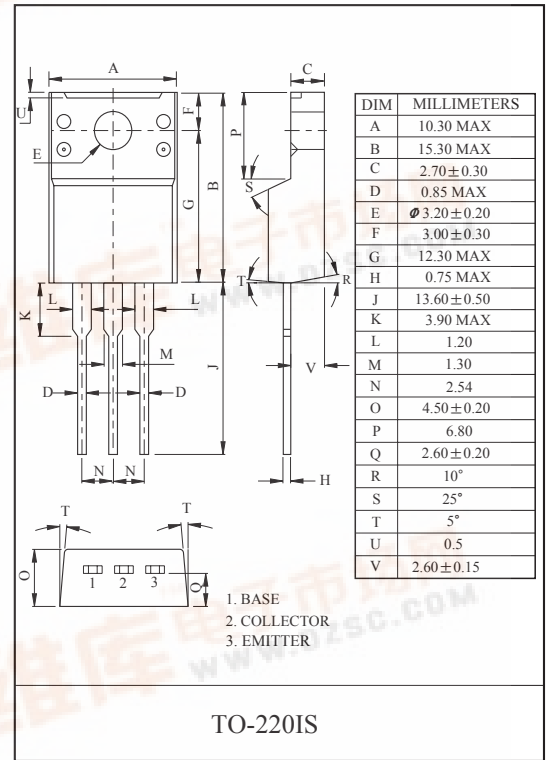
GENERAL PURPOSE APPLICATION.

FEATURES

- Complementary to TIP32CF.

MAXIMUM RATING (Ta=25°C)

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	A	
	Pulse	I_{CP}		5
Base Current	I_B	1	A	
Collector Power Dissipation	P_C	Ta=25°C	2	W
		Tc=25°C	25	W
Junction Temperature	T_j	150	°C	
Storage Temperature Range	T_{stg}	-55 ~ 150	°C	

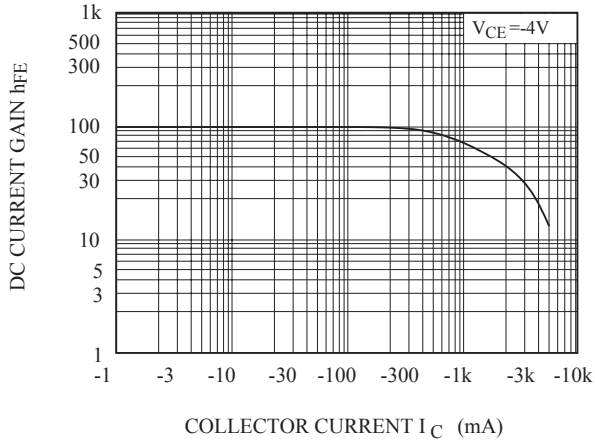


ELECTRICAL CHARACTERISTICS (Ta=25°C)

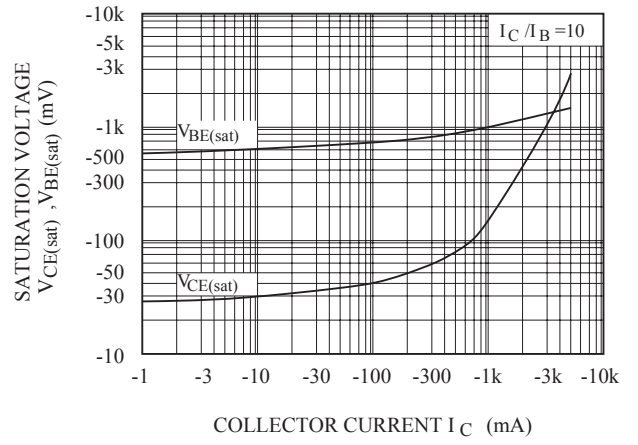
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Emitter Sustaining Voltage	$V_{CEO(SUS)}$	$I_C=30mA, I_B=0$	100	-	-	V
Collector Cut-off Current	I_{CEO}	$V_{CE}=60V, I_B=0$	-	-	0.3	mA
Collector Cut-off Current	I_{CES}	$V_{CE}=100V, V_{EB}=0$	-	-	200	μA
Emitter Cut-off Current	I_{EBO}	$V_{BE}=5V, I_C=0$	-	-	1	mA
DC Current Gain	h_{FE}	$V_{CE}=4V, I_C=1A$	25	-	-	
		$V_{CE}=4V, I_C=3A$	10	-	50	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=3A, I_B=375mA$	-	-	1.2	V
Base-Emitter On Voltage	$V_{BE(on)}$	$V_{CE}=4V, I_C=3A$	-	-	1.8	V
Transition Frequency	f_T	$V_{CE}=10V, I_C=500mA, f=1MHz$	3.0	-	-	MHz

TIP31CF

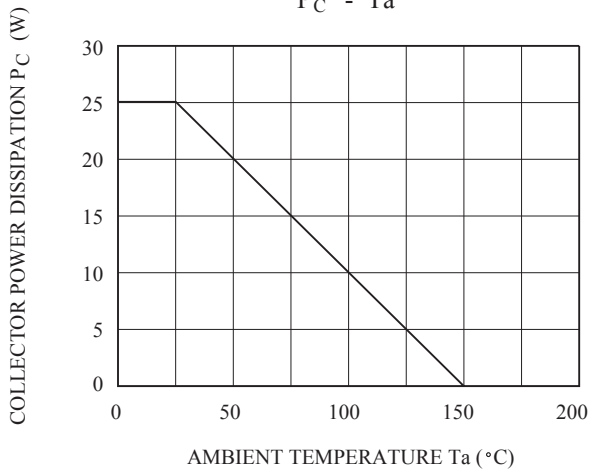
$h_{FE} - I_C$



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



$P_C - T_a$



SAFE OPERATING AREA

