

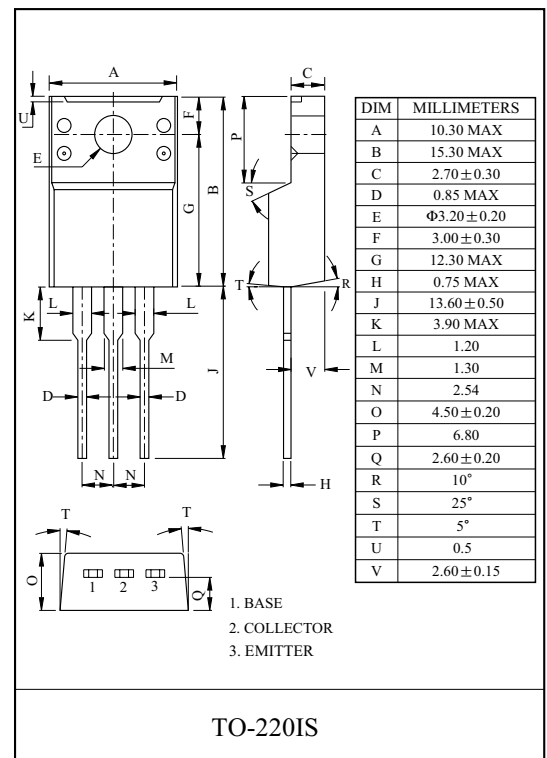
MONOLITHIC CONSTRUCTION WITH BUILT IN
BASE-EMITTER SHUNT RESISTORS INDUSTRIAL USE.

FEATURES

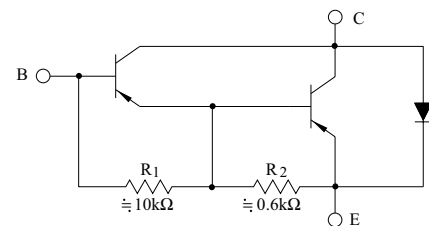
- High DC Current Gain.
: $h_{FE}=1000(\text{Min.})$, @ $V_{CE}=-4V$, $I_C=-1A$.
- Low Collector-Emitter Saturation Voltage.
- Complementary to TIP112F.

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}	
Base Current	DC	I_B	mA
Collector Power Dissipation	Ta=25°C	P_C	W
	Tc=25°C		
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-65 ~ 150	°C



EQUIVALENT CIRCUIT

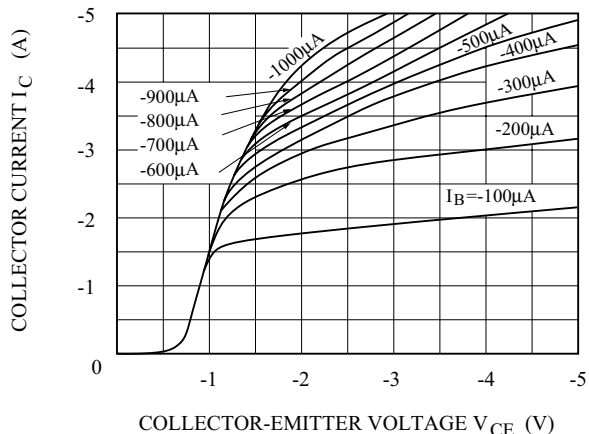


ELECTRICAL CHARACTERISTICS (Ta=25°C)

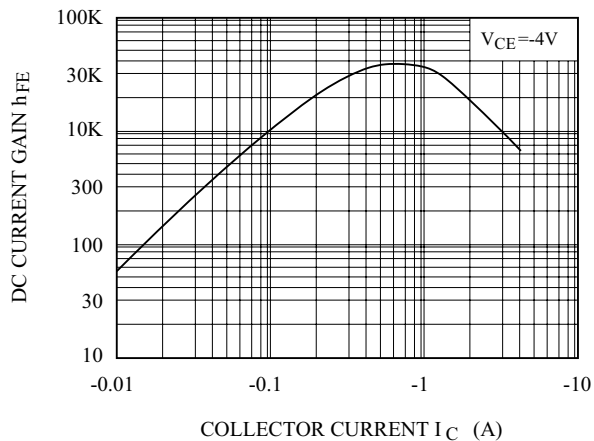
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CEO}	$V_{CE}=-50V$, $I_B=0$	-	-	-2	mA
	I_{CBO}	$V_{CB}=-100V$, $I_E=0$	-	-	-1	
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-5V$, $I_C=0$	-	-	-2	mA
DC Current Gain	h_{FE}	$V_{CE}=-4V$, $I_C=-1A$	1000	-	-	
		$V_{CE}=-4V$, $I_C=-2A$	500	-	-	
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	$I_C=-30mA$, $I_B=0$	-100	-	-	V
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-2A$, $I_B=-8mA$	-	-	-2.5	V
Base-Emitter On Voltage	$V_{BE(ON)}$	$V_{CE}=-4V$, $I_C=-2A$	-	-	-2.8	V
Collector Output Capacitance	C_{ob}	$V_{CB}=-10V$, $I_E=0$, $f=0.1MHz$	-	-	200	pF

TIP117F

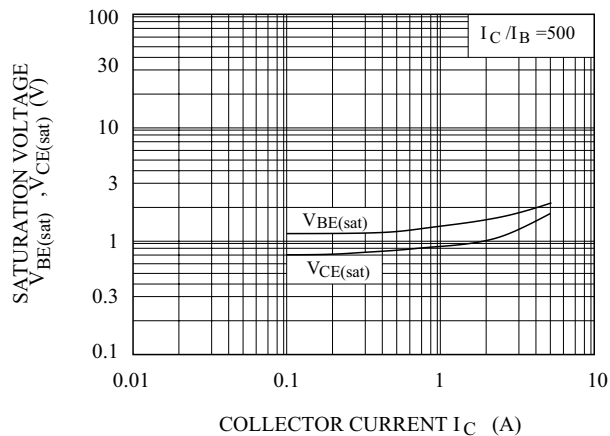
$I_C - V_{CE}$



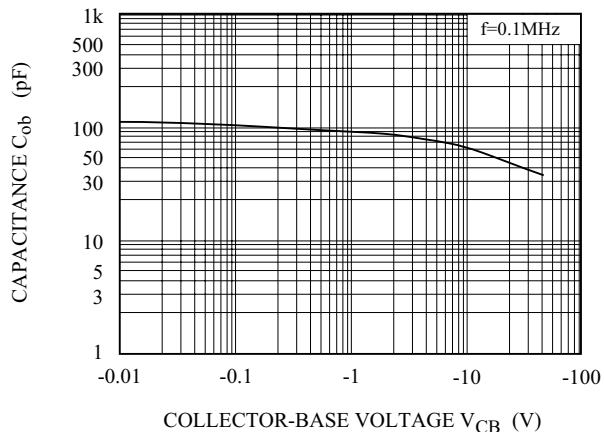
$h_{FE} - I_C$



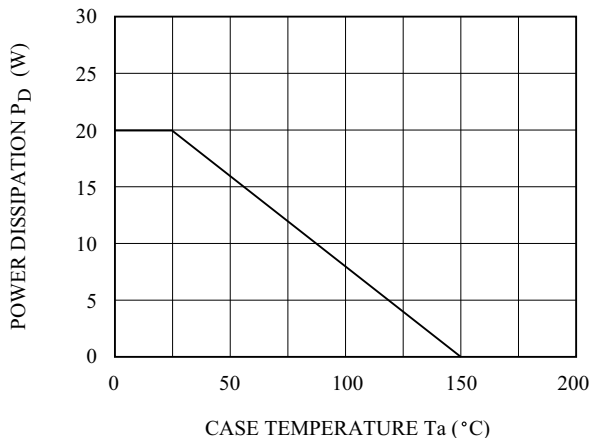
$V_{BE(sat)}, V_{CE(sat)} - I_C$



$C_{ob} - V_{CB}$



$P_D - T_a$



SAFE OPERATING AREA

