

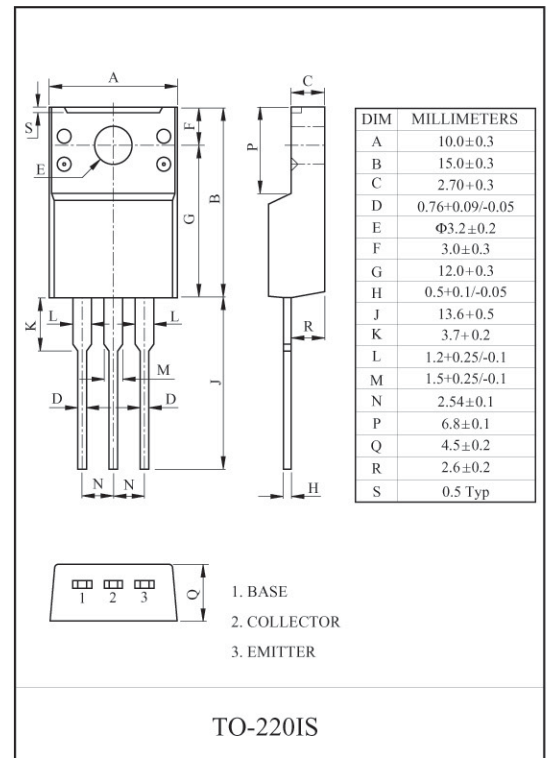
MONOLITHIC CONSTRUCTION WITH BUILT IN
BASE-EMITTER SHUNT RESISTORS INDUSTRIAL USE.

FEATURES

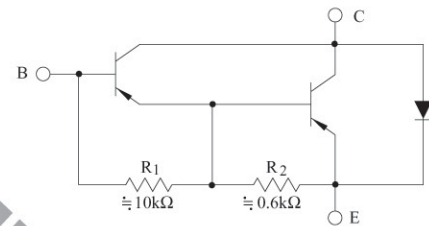
- High DC Current Gain.
: $h_{FE}=1000(\text{Min.})$, @ $V_{CE}=-4V$, $I_C=-1A$.
- Low Collector-Emitter Saturation Voltage.
- Complementary to TIP112F.

MAXIMUM RATING ($T_a=25^\circ\text{C}$)

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	-2
	Pulse	I_{CP}	-4
Base Current	DC	I_B	-50
Collector Power Dissipation	$T_a=25^\circ\text{C}$	P_C	2
	$T_c=25^\circ\text{C}$		20
Junction Temperature	T	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 ~ 150	$^\circ\text{C}$



EQUIVALENT CIRCUIT



ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-o Current	I_{CEO}	$V_{CE}=-50V$, $I_B=0$	-	-	-2	mA
	I_{CBO}	$V_{CB}=-100V$, $I_E=0$	-	-	-1	
Emitter Cut-o 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

