

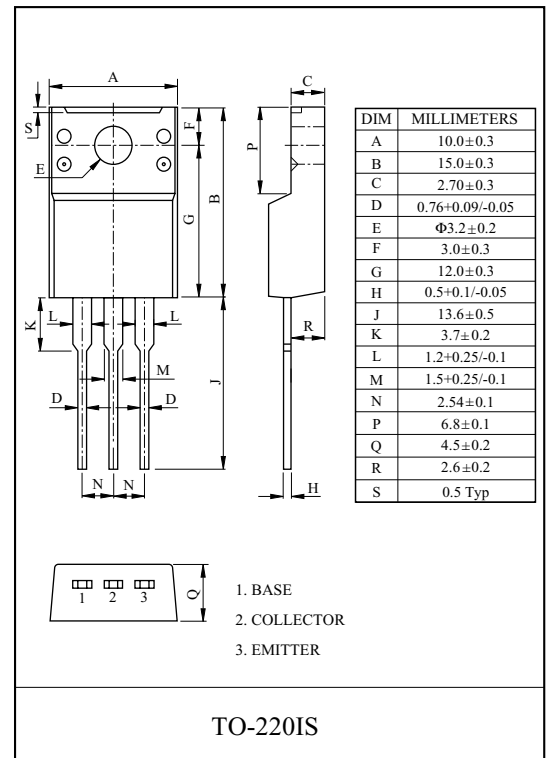
MONOLITHIC CONSTRUCTION WITH BUILT IN  
BASE-EMITTER SHUNT RESISTORS INDUSTRIAL USE.

### FEATURES

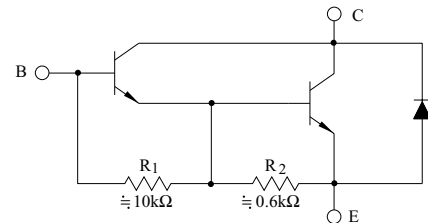
- High DC Current Gain.  
:  $h_{FE}=1000(\text{Min.})$ , @  $V_{CE}=4V$ ,  $I_C=1A$ .
- Low Collector-Emitter Saturation Voltage.
- Complementary to TIP117F.

### 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	A
	Pulse	$I_{CP}$	4	
Base Current	DC	$I_B$	50	mA
Collector Power Dissipation	$T_a=25^\circ\text{C}$	$P_C$	2	W
	$T_c=25^\circ\text{C}$		20	
Junction Temperature		$T_j$	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-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	$C_{ob}$	$V_{CB}=10V$ , $I_E=0$ , $f=0.1MHz$	-	-	100	pF

# TIP112F

