

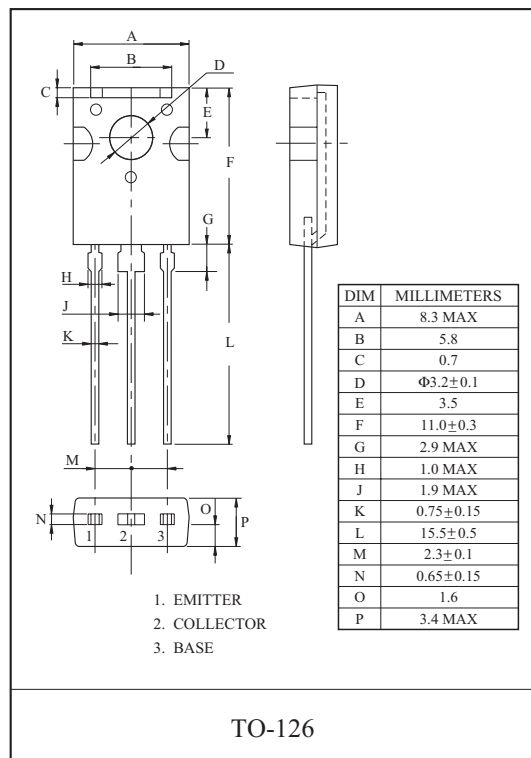
GENERAL PURPOSE APPLICATION.

FEATURES

- High Current. (Max. : -1.5A)
- DC Current Gain : $h_{FE}=40$ Min. @ $I_C=-0.15A$
- Complementary to BD139.

MAXIMUM RATING (Ta=25)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-100	V
Collector-Emitter Voltage		V_{CEO}	-80	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current		I_C	-1.5	A
Base Current		I_B	-0.5	A
Collector Power Dissipation	Ta=25	P_C	1.25	W
	Tc=25		10	
Junction Temperature		T_j	150	
Storage Temperature Range		T_{stg}	-55 150	

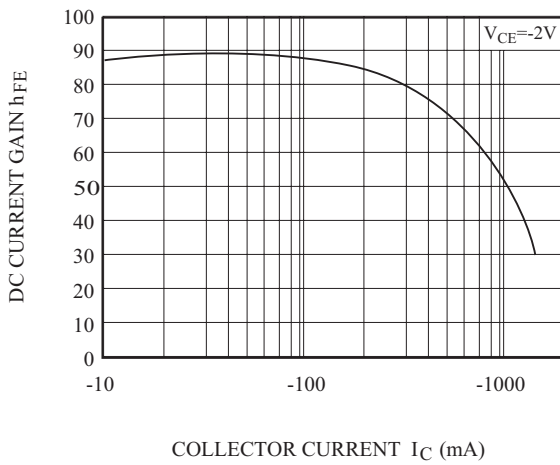


ELECTRICAL CHARACTERISTICS (Ta=25)

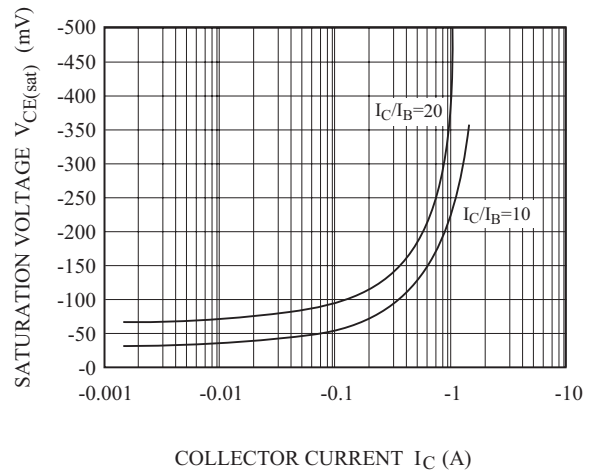
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=-30V, I_E=0$	-	-	-0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-5V, I_C=0$	-	-	-10	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=-30mA, I_B=0$	-80	-	-	V
DC Current Gain	$h_{FE}(1)$	$I_C=-5mA, V_{CE}=-2V$	25	-	-	
	$h_{FE}(2)$	$I_C=-150mA, V_{CE}=-2V$	40	-	250	
	$h_{FE}(3)$	$I_C=-500mA, V_{CE}=-2V$	25	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=-500mA, I_B=-50mA$	-	-	-0.5	V
Base-Emitter Voltage	V_{BE}	$V_{CE}=-2V, I_C=-500mA$	-	-	-1.0	V

BD140

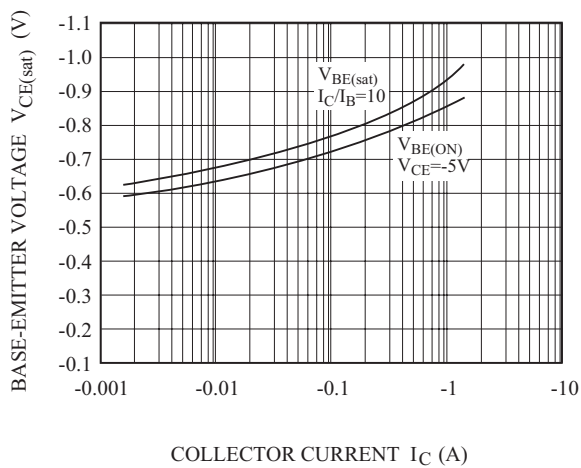
$h_{FE} - I_C$



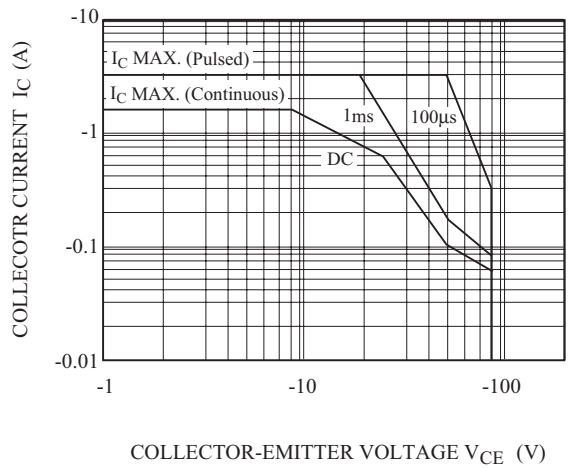
$V_{CE(sat)} - I_C$



$V_{CE(sat)} - I_C$



SAFE OPERATING AREA



$P_C - T_C$

