

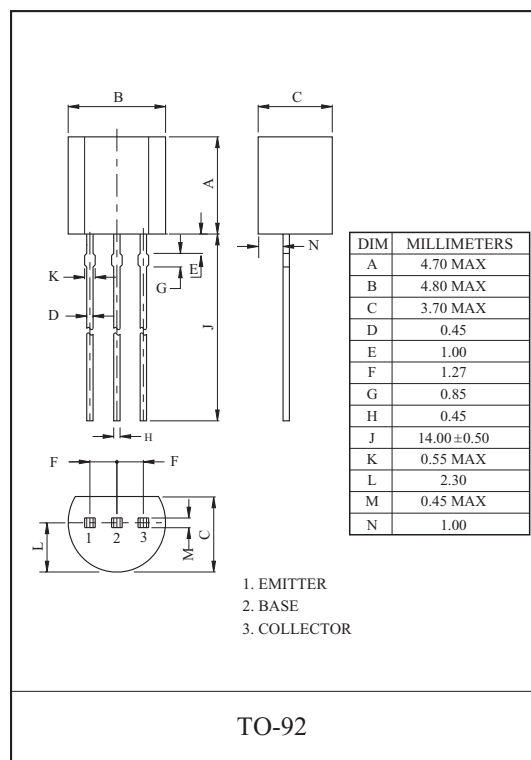
DARLINGTON TRANSISTOR

FEATURES

- Complementary to MPSA27.

MAXIMUM RATINGS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	-60	V
Collector-Emitter Voltage	V_{CES}	-60	V
Emitter-Base Voltage	V_{EBO}	-10	V
Collector Current	I_C	-500	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55 ~ -150	°C

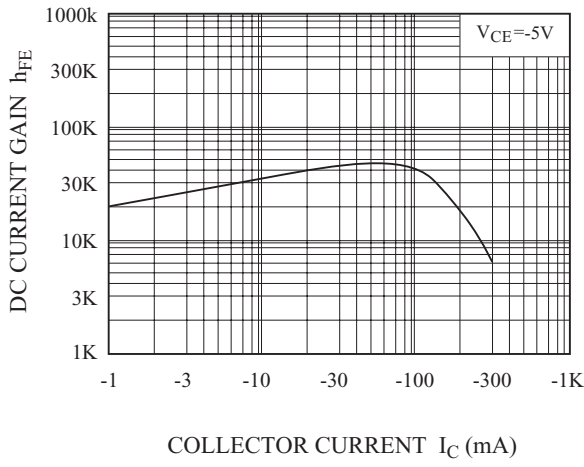


ELECTRICAL CHARACTERISTICS (Ta=25 °C)

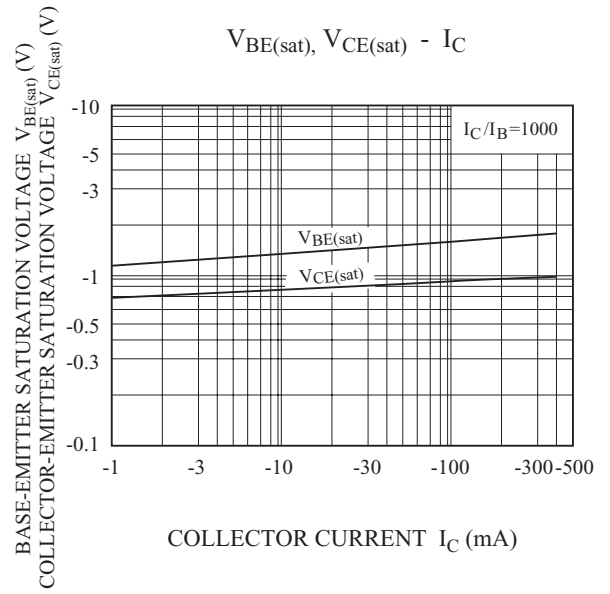
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CE} = -50V, I_E = 0$	-	-	-100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -10V, I_B = 0$	-	-	-100	nA
Collector-Emitter Breakdown Voltage	$V_{(BR)CES}$	$I_C = -100\mu A, I_B = 0$	-60	-	-	V
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = -100\mu A, I_E = 0$	-60	-	-	V
DC Current Gain	$h_{FE(1)}^*$	$V_{CE} = -5V, I_C = -10mA$	10K	-	-	
	$h_{FE(2)}^*$	$V_{CE} = -5V, I_C = -100mA$	10K	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}^*$	$I_C = -100mA, I_B = -0.1mA$	-	-	-1.5	V
Base-Emitter Voltage	V_{BE}^*	$V_{CE} = -5V, I_C = -100mA$	-	-	-2	V

* Pulse Test : PW ≤ 300μs, Duty Cycle ≤ 2%.

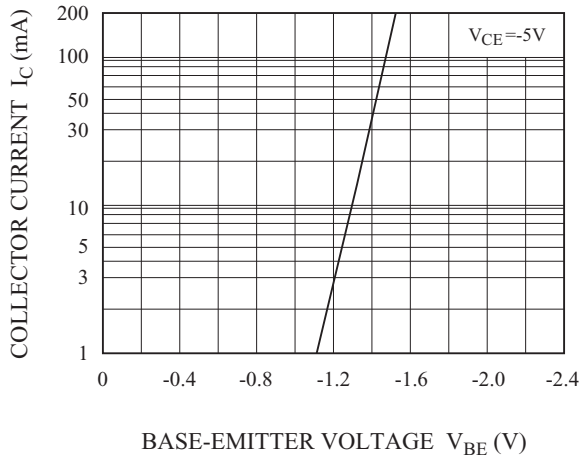
$h_{FE} - I_C$



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



$I_C - V_{BE}$



SAFE OPERATING AREA

