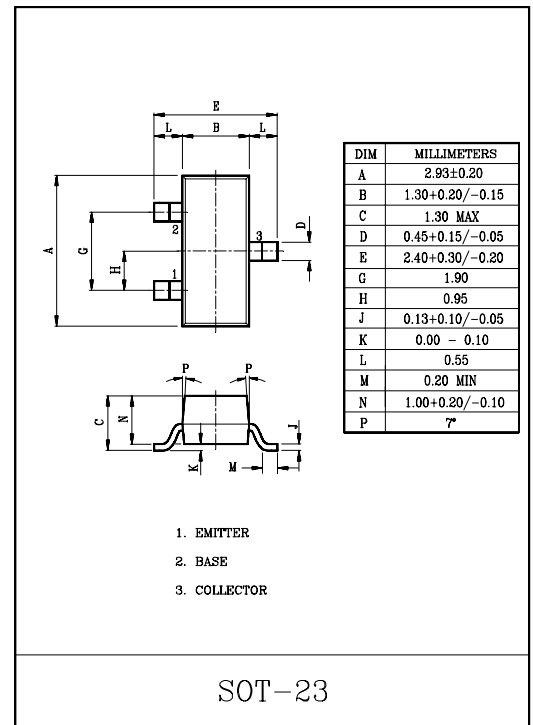


GENERAL PURPOSE APPLICATION.  
DARLINGTON TRANSISTOR.

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	MMBTA63/64	V <sub>CBO</sub>	-30 V
Collector-Emitter Voltage	MMBTA63/64	V <sub>CES</sub>	-30 V
Emitter-Base Voltage		V <sub>EBO</sub>	-10 V
Collector Current		I <sub>C</sub>	-500 mA
Collector Power Dissipation		P <sub>C</sub>	350 mW
Junction Temperature		T <sub>j</sub>	150 °C
Storage Temperature Range		T <sub>stg</sub>	-55 ~ 150 °C



ELECTRICAL CHARACTERISTICS (Ta=25°C)

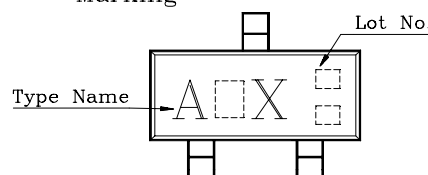
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT	
Collector-Emitter Breakdown Voltage	V <sub>CES</sub>	I <sub>C</sub> =-0.1mA	-30	-	-	V	
Collector Cut-off Current	I <sub>CBO</sub>	V <sub>CB</sub> =-30V	-	-	-0.1	μA	
Emitter Cut-off Current	I <sub>EBO</sub>	V <sub>EB</sub> =-10V	-	-	-0.1	μA	
DC Current Gain	MMBTA63	h <sub>FE</sub> (1) I <sub>C</sub> =-10mA, V <sub>CE</sub> =-5V	5,000	-	-		
	MMBTA64		10,000	-	-		
	MMBTA63	h <sub>FE</sub> (2) I <sub>C</sub> =-100mA, V <sub>CE</sub> =-5V	10,000	-	-		
	MMBTA64		20,000	-	-		
Collector-Emitter Saturation Voltage	MMBTA63/64	V <sub>CE(sat)</sub>	I <sub>C</sub> =-100mA, I <sub>B</sub> =-0.1mA	-	-	-1.5	V
Base Emitter Voltage	MMBTA63/64	V <sub>BE</sub>	I <sub>C</sub> =-100mA, V <sub>CE</sub> =-5V	-	-	-2.0	V
Current Gain Bandwidth Product	MMBTA63/64	f <sub>T</sub>	I <sub>C</sub> =-10mA, f=100MHz V <sub>CE</sub> =-5V	125	-	-	MHz

\* Pulse Test : Pulse Width ≤ 300μS, Duty Cycle ≤ 2%

MARK SPEC

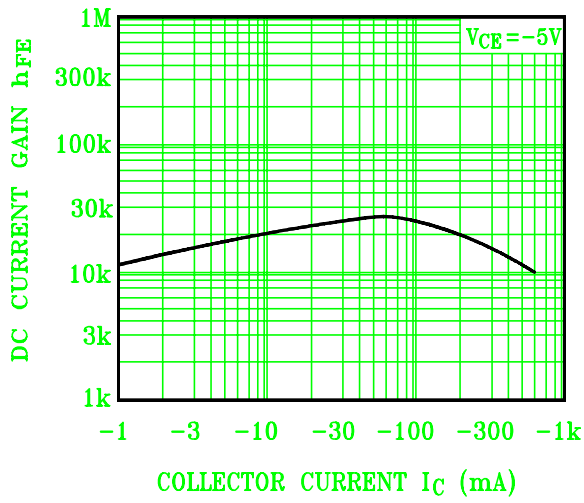
TYPE	MMBTA63	MMBTA64
MARK	AGX	AFX

Marking

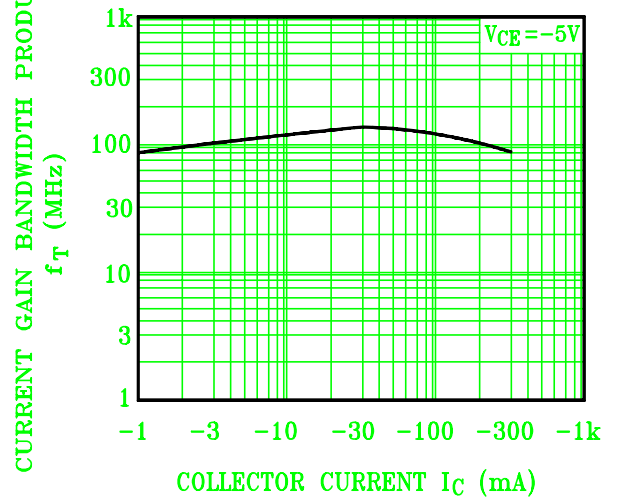


# MMBTA63/64

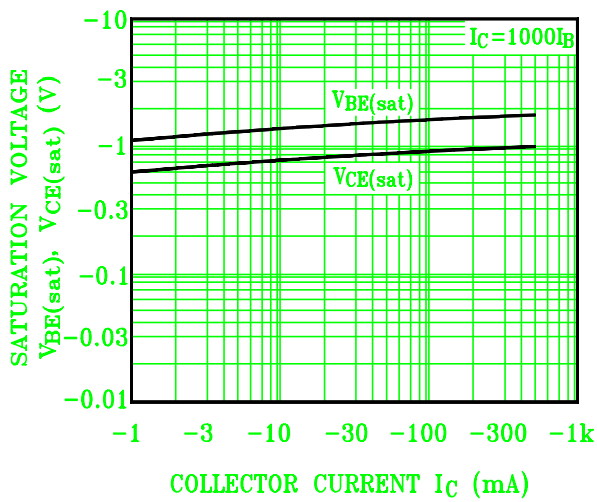
$h_{FE} - I_C$



$f_T - I_C$



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



$I_C - V_{BE}$

