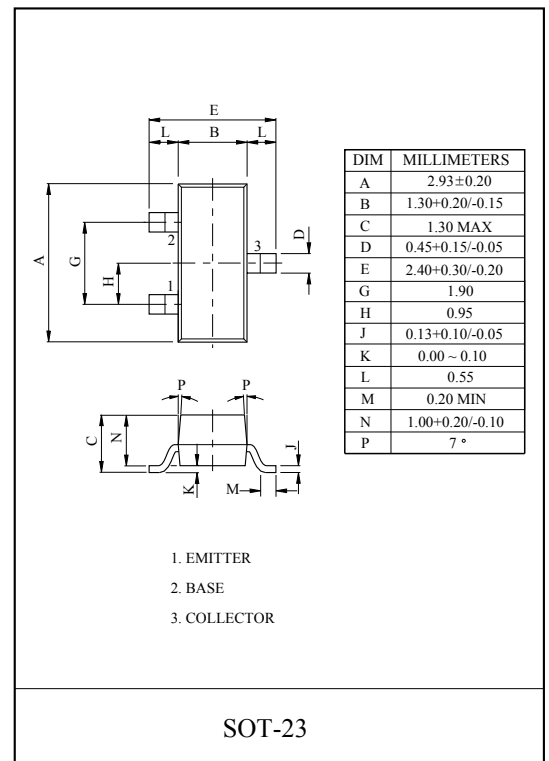


GENERAL PURPOSE HIGH DARLINGTON TRANSISTOR.

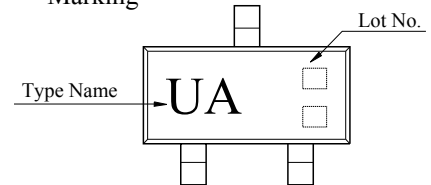
MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	10	V
Collector Current	I_C	400	mA
Collector Power Dissipation	P_C^*	350	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 ~ 150	°C

* : Package Mounted On 99.5% Alumina 10 × 8 × 0.6mm.



Marking

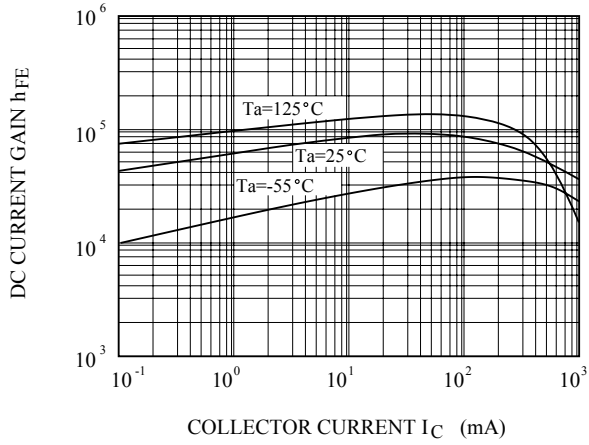


ELECTRICAL CHARACTERISTICS (Ta=25°C)

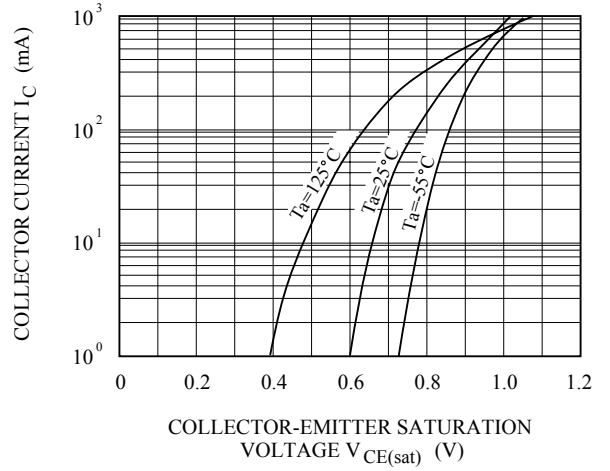
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=0.1mA$	40	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=10mA$	30	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=-1.0mA$	10	-	-	V
Collector Cut-off Current	I_{CBO}	$V_{CB}=40V$	-	-	1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=10V$	-	-	1	μA
DC Current Gain	h_{FE}	$I_C=100mA, V_{CE}=2V$	30K	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=1mA$	-	-	1	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100mA, I_B=10mA$	-	1.5	2	V
Current Gain Bandwidth Product	f_T	$I_C=100mA, f=100MHz, V_{CE}=2V$	-	220	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, f=1MHz$	-	5	-	pF

MMBTA517

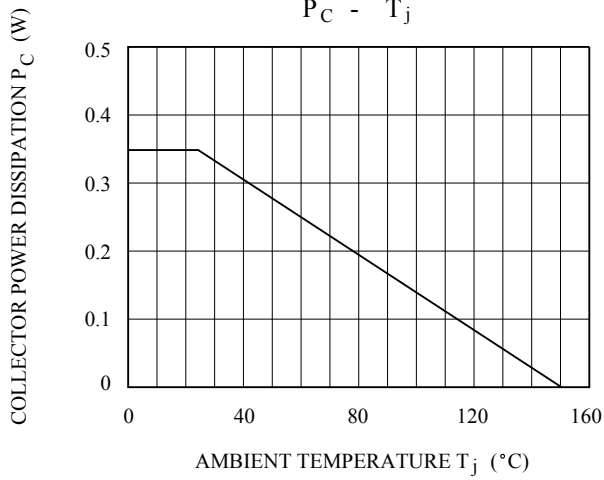
$h_{FE} - I_C$



$I_C - V_{CE(sat)}$



$P_C - T_j$



$I_C - V_{BE}$

