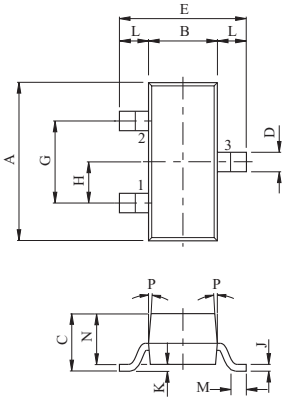
MMBTA63/64

EPITAXIAL PLANAR PNP TRANSISTOR

GENERAL PURPOSE APPLICATION.
DARLINGTON TRANSISTOR.



DIM	MILLIMETERS
A	2.93±0.20
B	1.30+0.20/-0.15
C	1.30 MAX
D	0.45+0.15/-0.05
E	2.40+0.30/-0.20
G	1.90
H	0.95
J	0.13+0.10/-0.05
K	0.00 ~ 0.10
L	0.55
M	0.20 MIN
N	1.00+0.20/-0.10
P	7 °

1. EMITTER
2. BASE
3. COLLECTOR

SOT-23

MAXIMUM RATING (Ta=25℃)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	MMBTA63/64	V_{CBO}	-30	V
Collector-Emitter Voltage	MMBTA63/64	V_{CES}	-30	V
Emitter-Base Voltage		V_{EBO}	-10	V
Collector Current	DC	I_C	-500	mA
	Pulse	I_{CP}	-1	A
Collector Power Dissipation		P_C *	350	mW
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55～150	℃

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

ELECTRICAL CHARACTERISTICS (Ta=25℃)

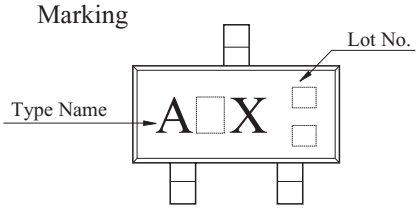
CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector-Emitter Breakdown Voltage		$V_{(BR)CES}$	I_C=-0.1mA, I_B=0	-30	-	-	V
Collector Cut-off Current		I_{CBO}	V_{CB}=-30V, I_E=0	-	-	-0.1	μA
Emitter Cut-off Current		I_{EBO}	V_{EB}=-10V, I_C=0	-	-	-0.1	μA
DC Current Gain	MMBTA63	h_{FE}(1)	I_C=-10mA, V_{CE}=-5V	5,000	-	-	
	MMBTA64			10,000	-	-	
	MMBTA63	h_{FE}(2)	I_C=-100mA, V_{CE}=-5V	10,000	-	-	
	MMBTA64			20,000	-	-	
Collector-Emitter Saturation Voltage	MMBTA63/64	$V_{CE(sat)}$	I_C=-100mA, I_B=-0.1mA	-	-	-1.5	V
Base Emitter Voltage	MMBTA63/64	V_{BE}	I_C=-100mA, V_{CE}=-5V	-	-	-2.0	V
Current Gain Bandwith Product	MMBTA63/64	f_T	I_C=-10mA, f=100MHz V_{CE}=-5V	125	-	-	MHz

*Pulse Test : Pulse Width≦300μS, Duty Cycle≦2.0%

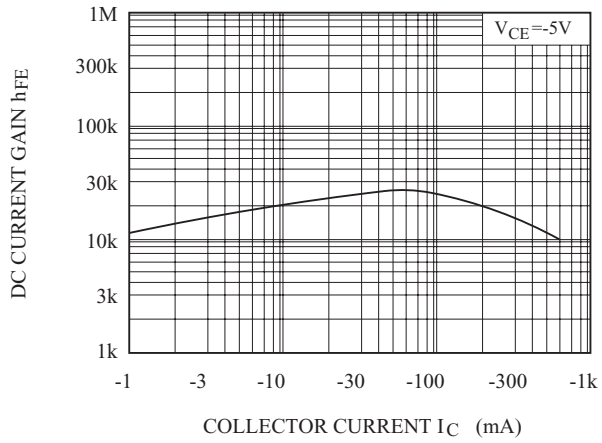
MARK SPEC

TYPE	MMBTA63	MMBTA64
MARK	AGX	AFX

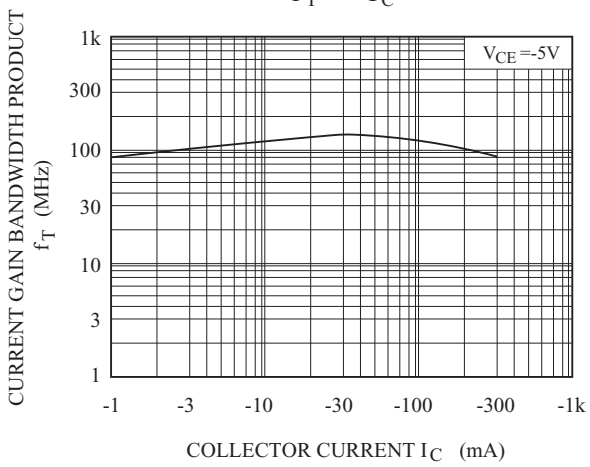
Marking



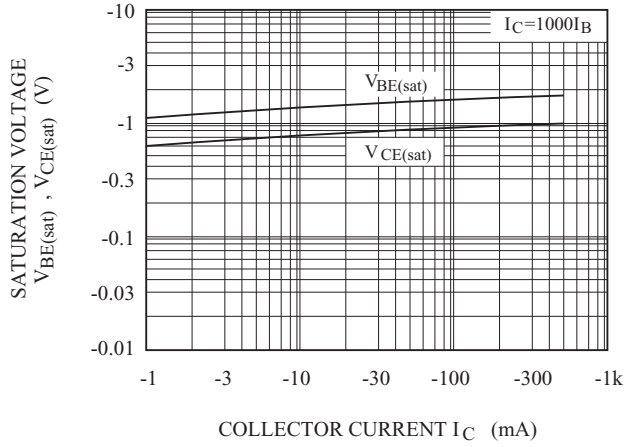
h_{FE} - I_C



f_T - I_C



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



I_C - V_{BE}