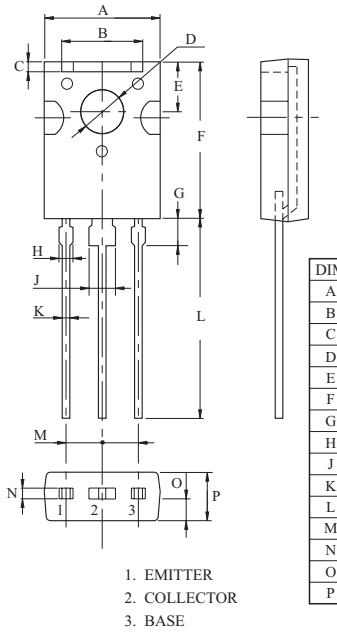
HIGH VOLTAGE SWITCHING.
POWER SUPPLY SWITCHING FOR TELEPHONES.

FEATURES

- High Voltage : V_{CEO}=-600V.
- High Speed Switching Time.
  : $t_f \leqq 1.0\ \mu s$ (I_C=-0.5A)
- Low Collector Emitter Saturation Voltage.
  : $V_{CE(sat)}$=-0.28V (I_C=-0.3A, I_B=-60mA)
- Wide Safe Operating Area (SOA).



DIM	MILLIMETERS
A	8.3 MAX
B	5.8
C	0.7
D	Φ3.2±0.1
E	3.5
F	11.0±0.3
G	2.9 MAX
H	1.0 MAX
J	1.9 MAX
K	0.75±0.15
L	15.5±0.5
M	2.3±0.1
N	0.65±0.15
O	1.6
P	3.4 MAX

TO-126

MAXIMUM RATING (Ta=25℃)

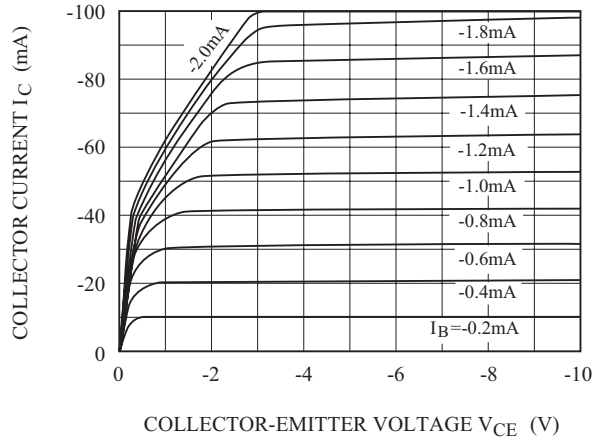
CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-600	V
Collector-Emitter Voltage		V_{CEO}	-600	V
Emitter-Base Voltag		V_{EBO}	-7	V
Collector Current	DC	I_C	-1.0	A
	Pulse *	I_{CP}	-2.0	
Collector Power Dissipation	Ta=25℃	P_C	1.5	W
	Tc=25℃		20	
Junction Temperature		T_j	150	℃
Storage Temperature Range		T_{stg}	-55 150	℃

* PW≦10ms, Duty Cycle≦50%.

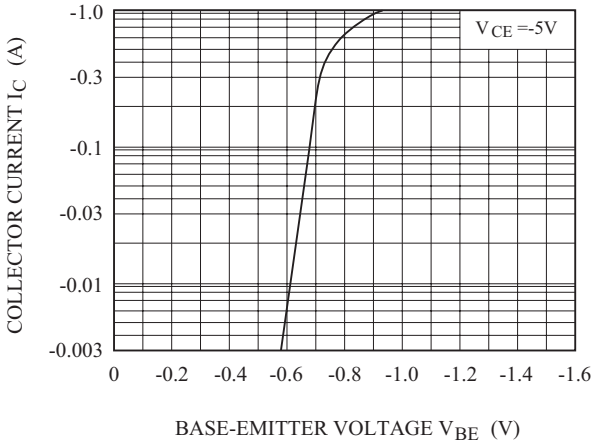
ELECTRICAL CHARACTERISTICS (Ta=25℃)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	V_{CB}=-600V, I_E=0	-	-	-10	μA
Emitter Cut-off Current		I_{EBO}	V_{EB}=-7.0V, I_C=0	-	-	-10	μA
DC Current Gain		h_{FE} (1)	V_{CE}=-5.0V, I_C=-0.1A	60	-	120	
		h_{FE} (2)	V_{CE}=-5.0V, I_C=-0.5A	5	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	I_C=-0.3A, I_B=-60mA	-	-0.28	-1.0	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	I_C=-0.3A, I_B=-60mA	-	-0.85	-1.2	V
Gain-Bandwidth Product		f_T	V_{CE}=-10V, I_E=50mA	-	28	-	MHz
Collector Output Capacitance		C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz	-	42	-	pF
Switching Time	Turn On Time	t_{on}	I_C=-0.5A, R_L=500Ω, I_{B1}=-I_{B2}=-0.1A, V_{CC}=-250V	-	0.1	0.5	μs
	Storage Time	t_{stg}		-	3.5	5.0	
	Fall Time	t_f		-	0.08	0.5	

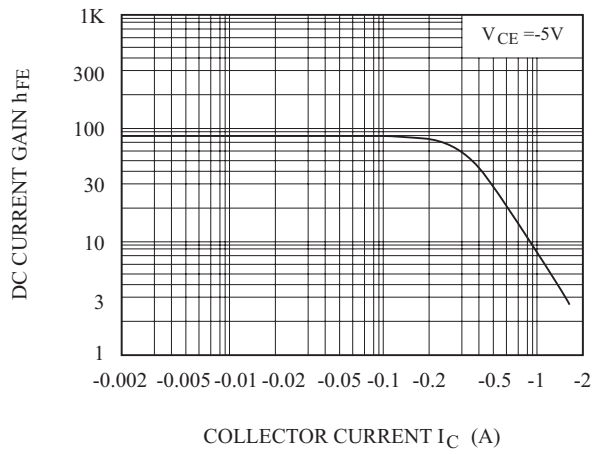
I_C - V_{CE}



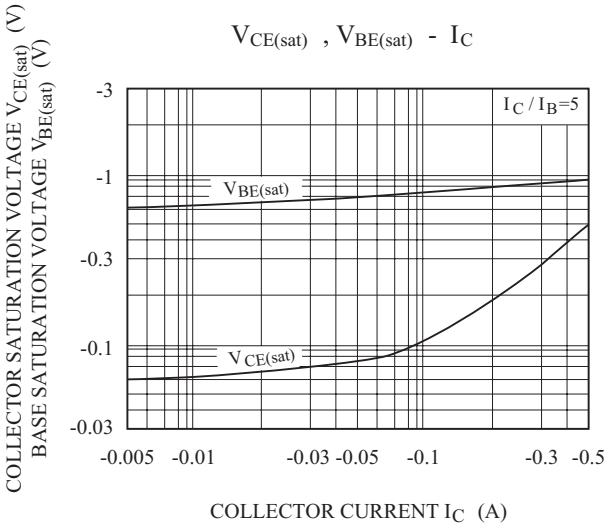
I_C - V_{BE}



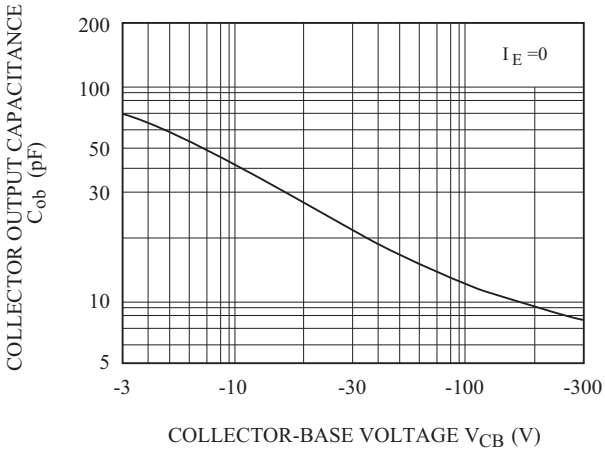
h_{FE} - I_C



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



C_{ob} - V_{CB}



P_C - T_a