

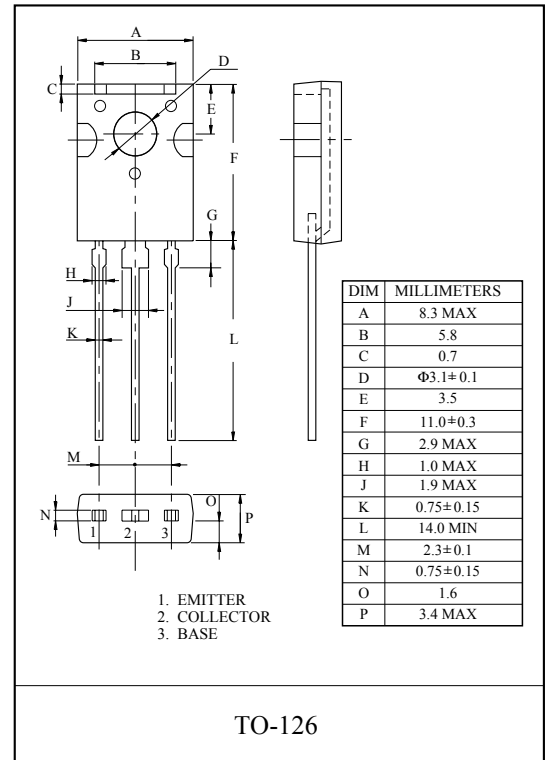
HIGH VOLTAGE APPLICATION.
DC-DC CONVERTER.
LOW POWER SWITCHING REGULATOR.

FEATURES

- High Breakdown Voltage.
: $V_{CE0} = -400V$
- Low Collector Saturation Voltage
: $V_{CE(sat)} = -1V(\text{max.})$, ($I_C = -100mA$, $I_B = -10mA$)
- High Speed Switching.

MAXIMUM RATING (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage		V_{CBO}	-400	V
Collector-Emitter Voltage		V_{CEO}	-400	V
Emitter-Base Voltage		V_{EBO}	-7	V
Collector Current	DC	I_C	-0.5	A
	Pulse	I_{CP}	-1	
Base Current		I_B	-0.25	A
Collector Power Dissipation	Ta=25°C	P_C	1.5W	W
	Tc=25°C		10W	
Junction Temperature		T_j	150	°C
Storage Temperature		T_{stg}	-55 ~ 150	°C



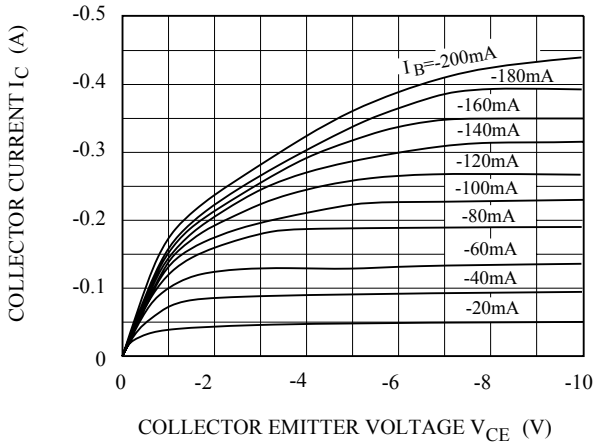
ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Base Voltage		$V_{(BR)CBO}$	$I_C = -100\mu A$, $I_E = 0$	-400	-	-	V
Collector Emitter Voltage		$V_{(BR)CEO}$	$I_C = -1mA$, $I_B = 0$	-400	-	-	
Collector Cutoff Current		I_{CBO}	$V_{CB} = -400V$, $I_E = 0$	-	-	-10	μA
Emitter Cutoff Current		I_{EBO}	$V_{EB} = -5V$, $I_C = 0$	-	-	-10	
DC Current Gain		h_{FE} (Note)	$V_{CE} = -5V$, $I_C = -100mA$	60	-	200	-
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C = -100mA$, $I_B = -10mA$	-	-	-1	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C = -100mA$, $I_B = -10mA$	-	-	-1.2	
Switching Time	Turn On Time	t_{ON}	$I_C = -100mA$, $R_L = 1.5k\Omega$	-	-	1	μS
	Storage Time	t_{stg}	$I_{B1} = -10mA$, $I_{B2} = 20mA$	-	-	4	
	Fall Time	t_f	$V_{CC} = -150V$	-	-	1	

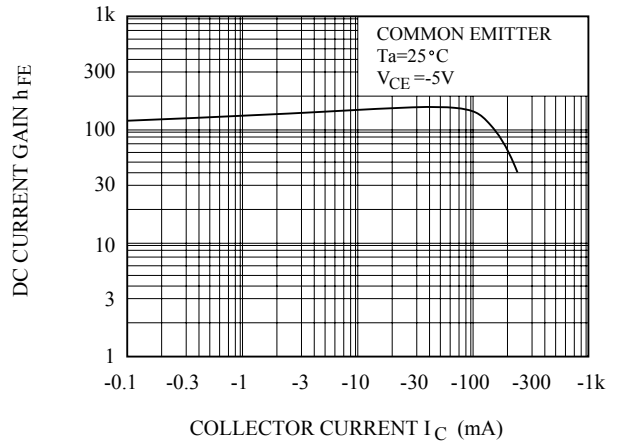
Note : h_{FE} Classification O:60~120, GR:100~200

KTA1703

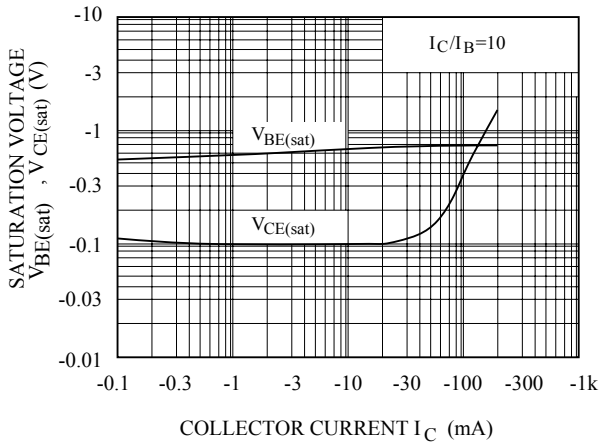
$I_C - V_{CE}$



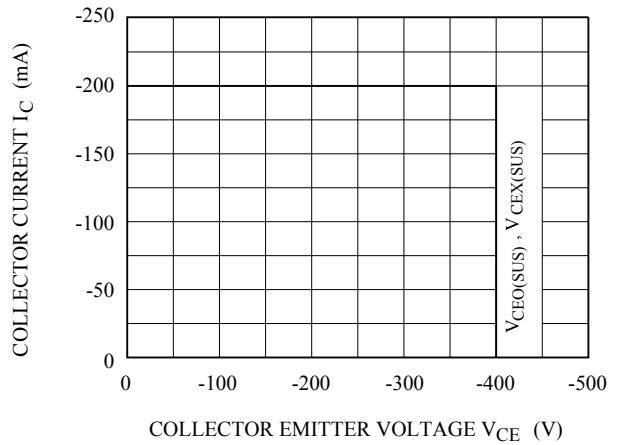
$h_{FE} - I_C$



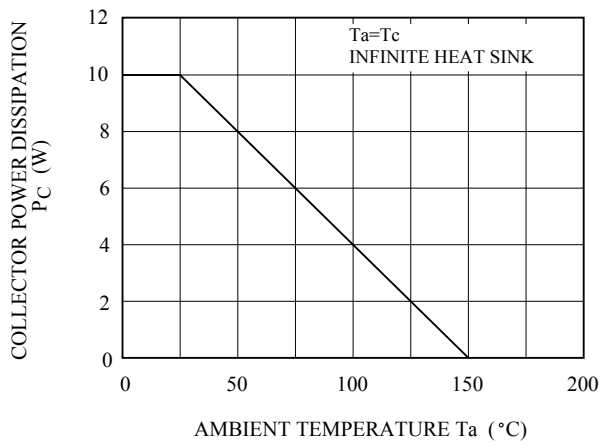
$V_{BE(sat)}, V_{CE(sat)} - I_C$



REVERSE BIAS SAFE OPERATING AREA



$P_c - T_a$



SAFE OPERATING AREA

