

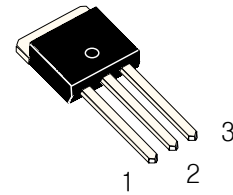
GENERAL PURPOSE AMPLIFIER

- ◇ Low Speed Switching
- ◇ Complement to WSC752

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

Characteristic	Symbol	Value	Unit
Collector-Base Voltage	V _{CB0}	-40	V
Collector-Emitter Voltage	V _{CEO}	-30	V
Emitter-Base voltage	V _{EBO}	-5	V
Collector Current(DC)	I _c	-2	A
Collector Current(Pulse)*	I _c	-7	A
Base Current	I _B	-0.6	A
Collector Power Dissipation(Tc=25°C)	P _C	15	W
Collector Power Dissipation(Ta=25°C)	P _C	1.2	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55~ +150	°C

I-pak



- 1. Base
- 2. Collector
- 3. Emitter

*PW ≤ 10ms, Duty Cycle ≤ 50%

ELECTRICAL CHARACTERISTICS

(Ta=25°C, unless otherwise specified)

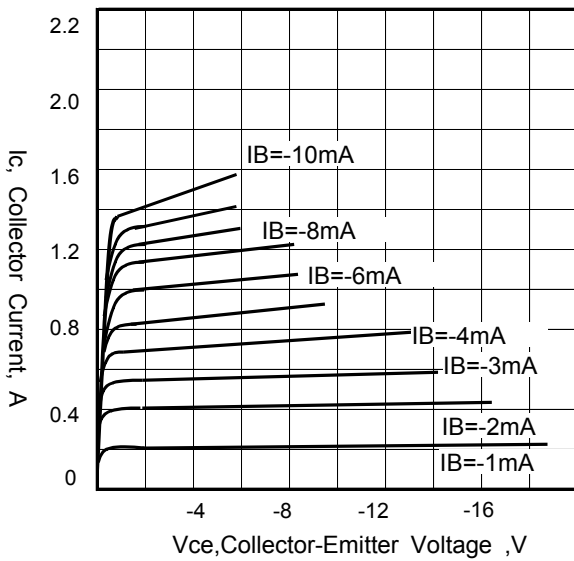
Characteristic	Symbol	Test Condition	Min	TYP	MAX	Unit
Collector-Base Breakdown Voltage	BV _{CB0}	I _c =-100μA, I _E =0	-40			V
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _c =-10mA, I _B =0	-30			V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _c =-1mA, I _C =0	-5			V
Collector Cut-off Current	I _{CBO}	V _{CB} =-40V, I _E =0			-0.1	μA
Emitter Cut-off Current	I _{EBO}	V _{EB} =-5V, I _C =0			-0.1	μA
*DC Current Gain	#h _{FE}	V _{CE} =-2V, I _C =-500mA	100		400	
*Collector-Emitter Saturation Voltage	V _{CE(sat)(1)} V _{CE(sat)(2)}	I _C =-2.0A, I _B =-200mA I _C =-1.5A, I _B =-30mA		-0.5	-0.8 -2	V
Current Gain Bandwidth Product	f _T	V _{CE} =-5V, I _C =-500mA		120		MHZ
Output Capacitance	C _{ob}	V _{CB} =-10V, I _E =0 f=1MHZ		13		pF

* Pulse test: PW ≤ 350us, Duty cycle ≤ 2%

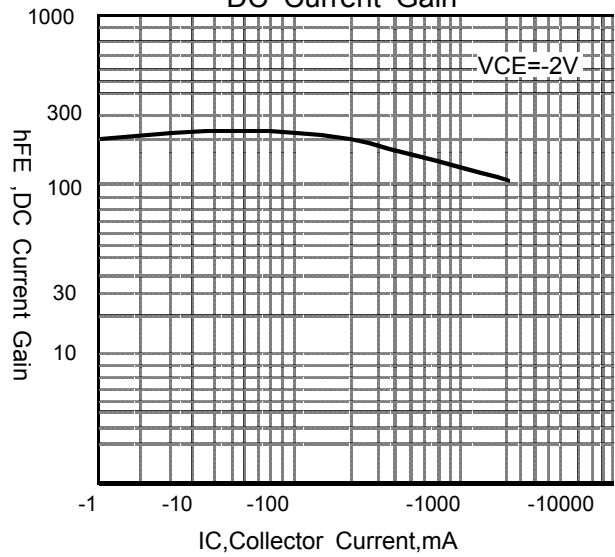
h_{FE} Classification:

Classification	O	Y	G
h _{FE}	100~200	160~320	200~400

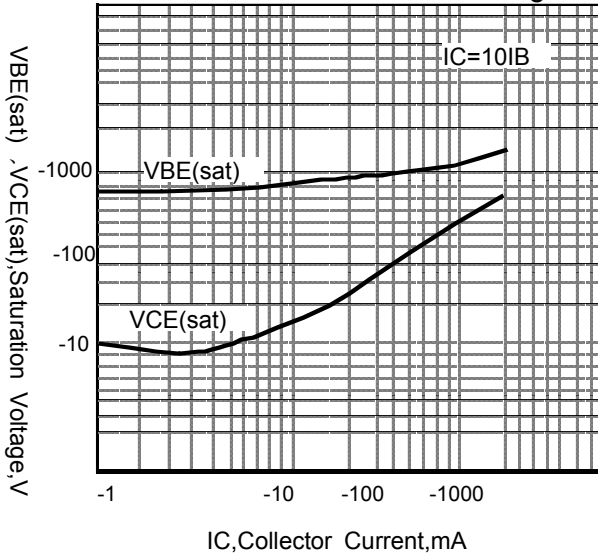
Static Characteristics



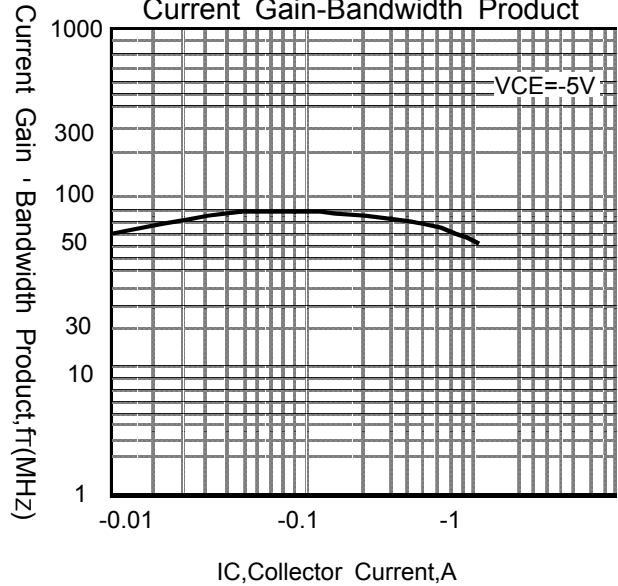
DC Current Gain



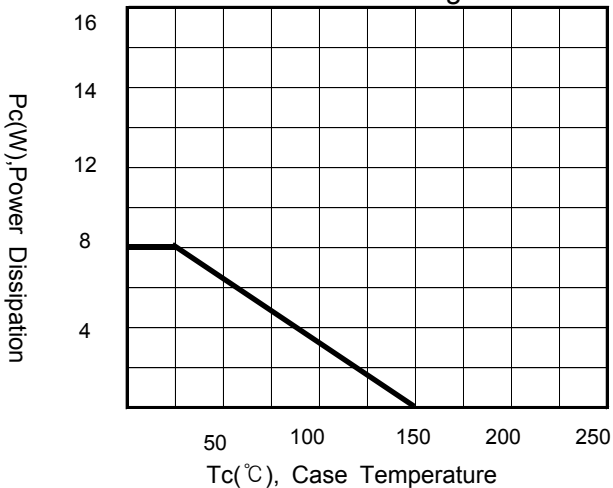
Base Emitter Saturation Voltage
Collector Emitter Saturation Voltage



Current Gain-Bandwidth Product



Power Derating



Safe Operating Area

