wooseok s.tech corp.

WSA753

PNP EPITAXIAL SILICON TRANSISTOR

GENERAL PURPOSE AMPLIFIER

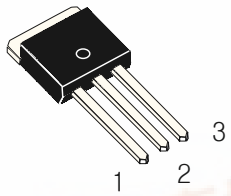
- ◇ Low Speed Switching
- ◇ Complement to WSC752

ABSOLUTE MAXIMUM RATINGS (Ta=25℃)

Characteristic	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-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)*	Ic	-7	A
Base Current	I_B	-0.6	A
Collector Power Dissipation(Tc=25℃)	P_C	15	W
Collector Power Dissipation(Ta=25℃)	P_C	1.2	W
Junction Temperature	Tj	150	℃
Storage Temperature	Tstg	-55~ +150	℃

*PW≤ 10ms,Duty Cycle≤ 50%

I-pak



1. Base
2. Collector
3. Emitter

ELECTRICAL CHARACTERISTICS (Ta=25℃, unless otherwise specified)

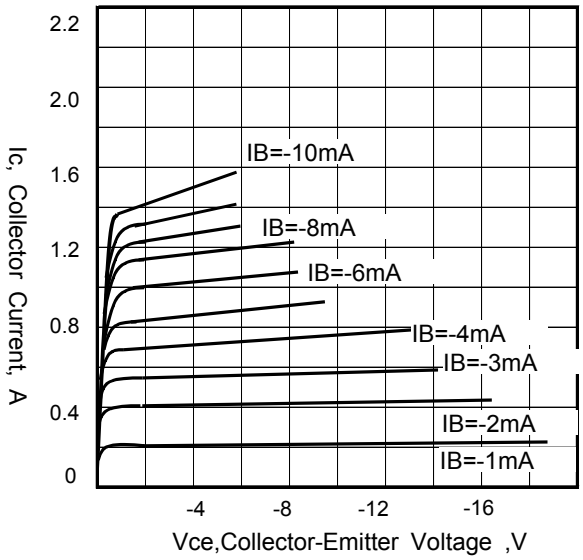
Characteristic	Symbol	Test Condition	Min	TYP	MAX	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=-100μA ,I_E=0	-40			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=-10mA, I_B=0	-30			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_C=-1mA ,I_C=0	-5			V
Collector Cut-off Current	I_{CBO}	V_{CB}=-40V ,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 Bandwith Product	f_T	V_{CE}=-5V,I_C=-500mA		120		MHZ
Output Capacitance	Cob	V_{CB}=-10V ,I_E=0 f=1MHZ		13		pF

* Pulse test:PW≤ 350us,Duty cycle≤ 2%

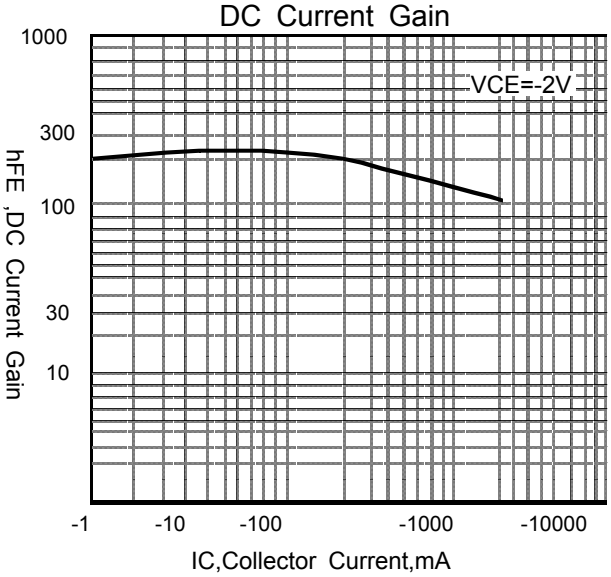
hFE Classification:

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

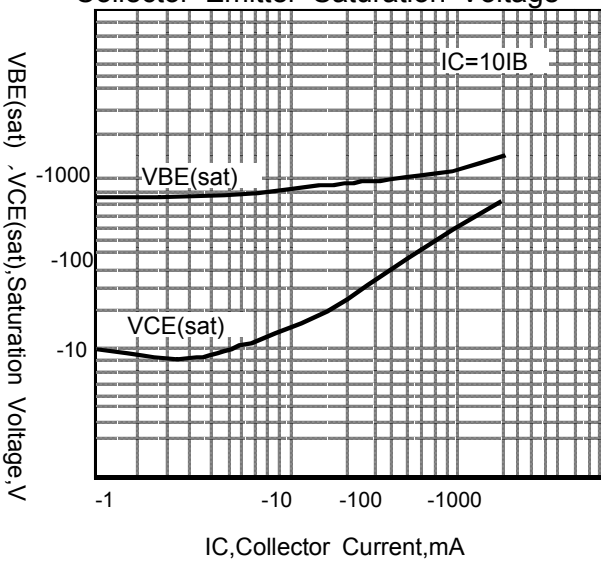
Static Characteristics



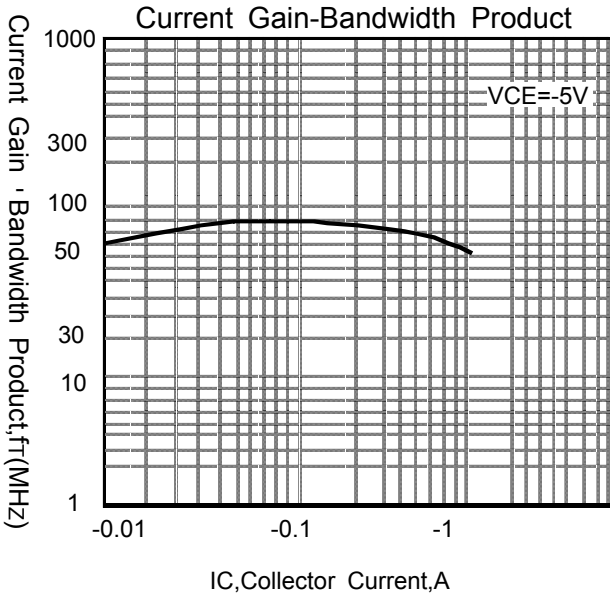
DC Current Gain



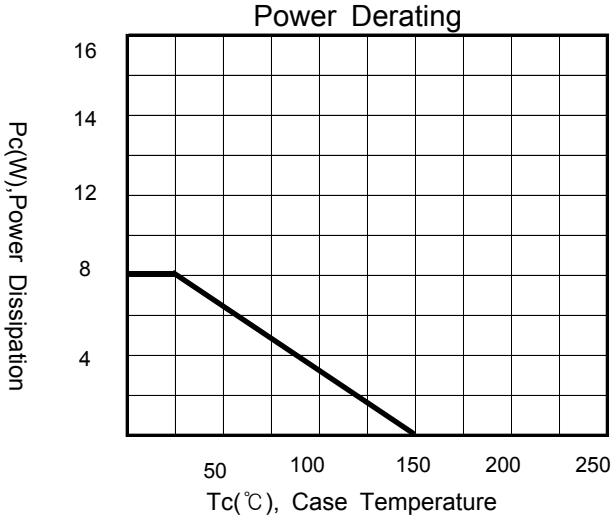
Base Emitter Saturation Voltage
Collector Emitter Saturation Voltage



Current Gain-Bandwidth Product



Power Derating



Safe Operating Area