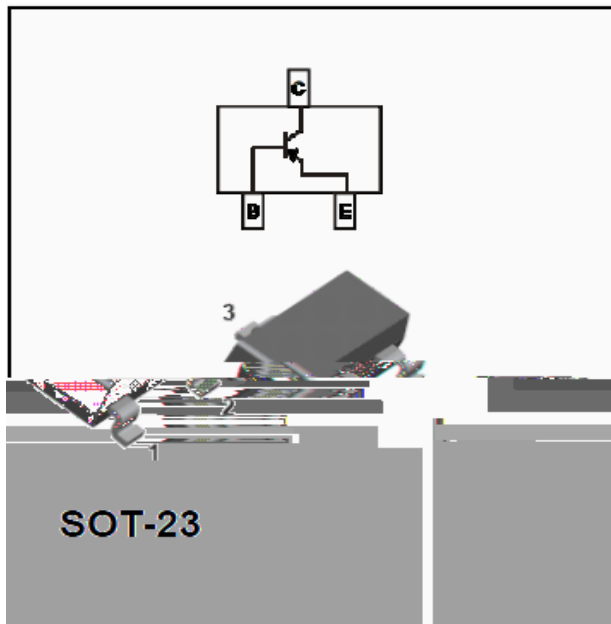




PNP General Purpose Amplifier



Features

- χEpoxy meets UL-94 V-0 flammability rating
- χHalogen free available upon request by adding suffix ðHFð
- χMoisure Sensitivity Level 1
- χMarking:2A

ΩMaximum Rating (T_a=25 Unless otherwise specified)

Item	Symbol	Unit	Value
	CBO	V	- 4 0
Emitter-Base Voltage	V _{BE}	V	- 5 . 0
Collector Current	I _C	A	-0 . 2
Collector Power Dissipation	P _C	mW	300
Operation J unction Temperature	T _j		-55 to +150
Storage Temperature	T _{stg}		-55 to +150

ΩOrdering Information (Example)

PREF	ΩT					OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MMBT3906	F2	Approximate 0.008	3000	30000		120000	7ð reel
MMBT3906	F4	Approximate 0.008	10000	/		210000	13ð reel



MMBT3906

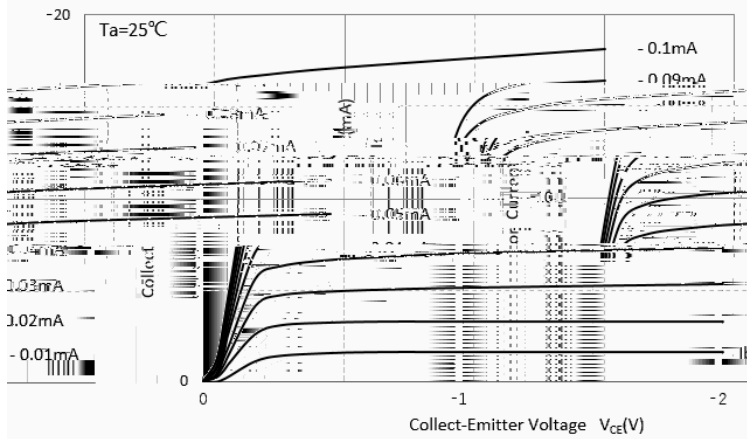
Electrical Characteristics $T_a=25$ Unless otherwise specified

Item	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Breakdown Voltage	V_{CEO}	Vdc	$I_C=-1.0\text{mA}$, $I_B=0$	-40	
Collector-Base Breakdown Voltage	V_{CBO}	Vdc	$I_C=-10\mu\text{A}$, $I_E=0$	-40	
Emitter-Base Breakdown Voltage	V_{EBO}	Vdc	$I_E=-10\mu\text{A}$, $I_C=0$	-5.0	
Collector-base cut-off Current	I_{CBO}	μA	$V_{CB}=-40\text{Vdc}$, $I_E=0$		-0.1
Collector-emitter cut-off Current	I_{CEX}	nA	$V_{CE}=-30\text{Vdc}$, $V_{BE}=-3.0\text{Vdc}$		-50
Emitter-base cut-off Current	I_{EBO}	μA	$V_{EB}=-5\text{Vdc}$, $I_C=0$		-0.1
DC Current Gain	h_{FE}		$I_C=-10\text{mA}$, $V_{CE}=-1.0\text{Vdc}$	100	300
			$I_C=-50\text{mA}$, $V_{CE}=-1.0\text{Vdc}$	60	
			$I_C=-100\text{mA}$, $V_{CE}=-1.0\text{Vdc}$	30	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	Vdc	$I_C=-10\text{mA}$, $I_B=-1.0\text{mA}$		-0.25
			$I_C=-50\text{mA}$, $I_B=-5.0\text{mA}$		-0.4
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	Vdc	$I_C=-10\text{mA}$, $I_B=-1.0\text{mA}$	-0.65	-0.85
			$I_C=-50\text{mA}$, $I_B=-5.0\text{mA}$		-0.95
Collector-base Output Capacitance	C_{obo}	pF	$V_{CB}=-5.0\text{Vdc}$, $f=1.0\text{MHz}$, $I_E=0$		4.5
Emitter-base Input Capacitance	C_{ibo}	pF	$V_{EB}=-0.5\text{Vdc}$, $f=1.0\text{MHz}$, $I_C=0$		10
Transition frequency	f_T	MHZ	$I_C=-10\text{mA}$, $V_{CE}=-20\text{Vdc}$, $f=100\text{MHz}$	250	
Noise Figure	NF	dB	$V_{CE}=-5.0\text{V}$, $f=1.0\text{kHz}$, $I_C=-100\mu\text{A}$, $R_S=1.0\text{K}$		4.0
Delay time	t_d	ns	$V_{CC}=-3\text{V}$, $V_{BE(off)}=-0.5\text{V}$, $I_C=-10\text{mA}$, $I_{B1}=-1\text{mA}$		35
Rise time	t_r	ns			35
Storage time	t_s	ns	$V_{CC}=-3\text{V}$, $I_C=-10\text{mA}$, $I_{B1}=-I_{B2}=-1\text{mA}$		225
Fall time	t_f	ns			75

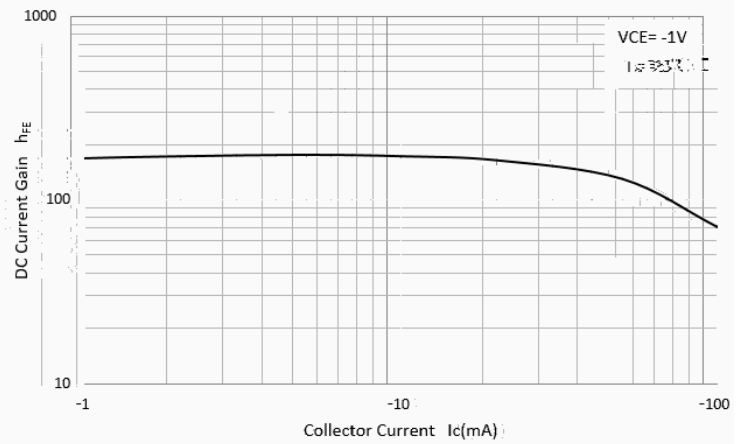


■ Characteristics(Typical)

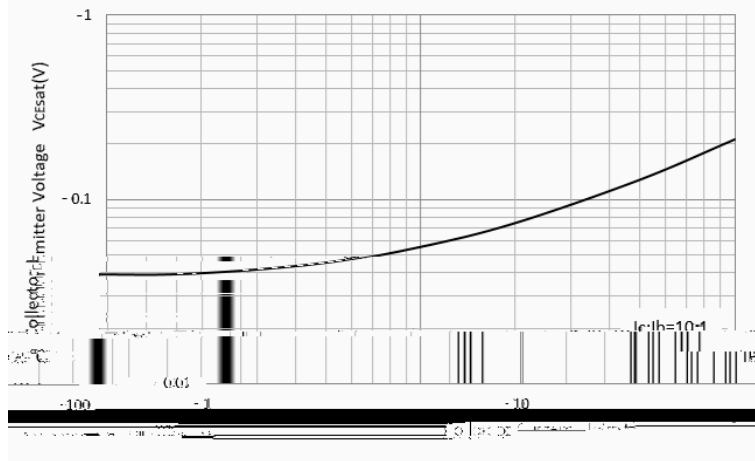
Static Characteristic



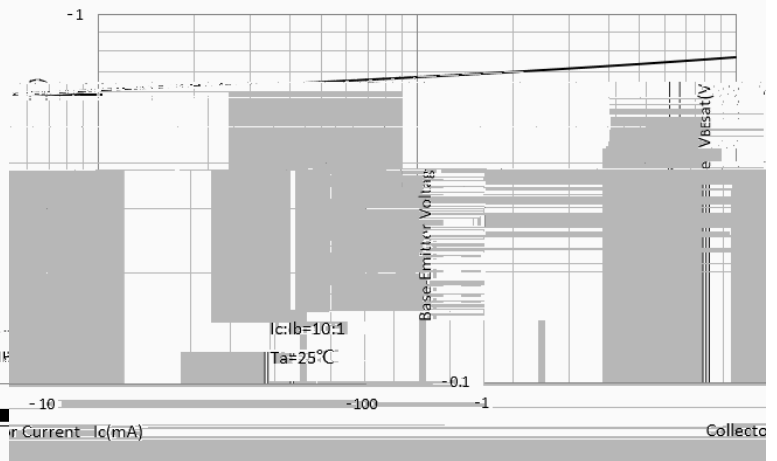
DC Current Gain



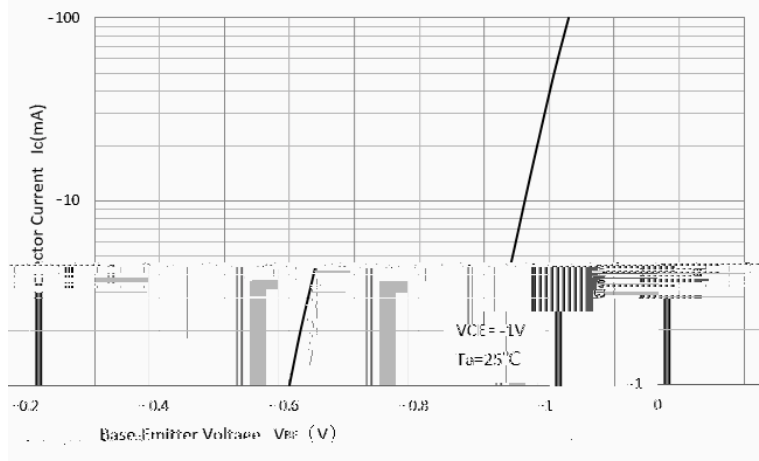
Collector-Emitter Saturation Voltage



Base-Emitter Saturation Voltage



Base-Emitter On Voltage



0 0 % 7



■Marking code

2A = Product Type Marking Code
Y = Date Code Marking Code

Date code Key (2 years a cycle)

				Year	2011							
Sep	Oct	Nov	Dec	Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
M	E	C	F	Code	J	Q	K	G	H	R	P	D

2012				Year	2012							
Sep	Oct	Nov	Dec	Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
R	H	A	U	Code	W	N	V	S	T	L	X	B



Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment d