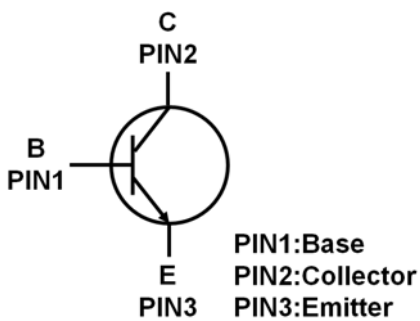
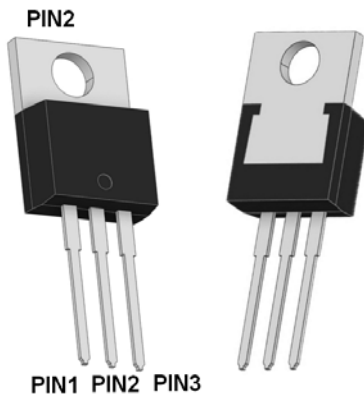


NPN Power Transistor



Features

- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 1

Applications

- Designed for general purpose amplifier and low speed switching applications.

Mechanical Data

- Package: TO-220AB
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ Maximum Ratings (Ta=25°C unless otherwise noted)

Item	Symbol	Unit	Value
Device marking code			MJC44H11
Collector-Base Voltage	V_{CBO}	V	100
Collector-Emitter Voltage	V_{CEO}	V	80
Emitter-Base Voltage	V_{EBO}	V	6
Collector Current -Continuous	I_C	A	8
Total Device Dissipation (*)	P_D	W	1.25
Thermal Resistance, Junction to Ambient Air (*)	R_{thJA}	°C/W	100
Junction Temperature	T_j	°C	-55 to +150
Storage Temperature	T_{STG}	°C	-55 to +150

(*) Device mounted on FR-4 PCB 1.0*1.0*0.06 inch, mounting pad for collector 1 cm²



MJC44H11

■ Electrical Characteristics (Ta=25°C unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-base breakdown voltage	V_{CBO}	V	$I_C=100\mu A, I_E=0$	100		
Collector-emitter breakdown voltage	V_{CEO}	V	$I_C=10mA, I_B=0$	80		
Emitter-base breakdown voltage	V_{EBO}	V	$I_E=100\mu A, I_C=0$	6		
Collector-base cut-off current	I_{CES}	μA	$V_{CE}=80V, V_{EB}=0$	-	-	10
Emitter-base cut-off current	I_{EBO}	μA	$V_{EB}=5V, I_C=0$			1
DC current gain	h_{FE}		$V_{CE}=1V, I_C=2A$	60		
			$V_{CE}=1V, I_C=4A$	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	V	$I_C=8A, I_B=0.4A$			1
Base-emitter saturation voltage	$V_{BE(sat)}$	V	$I_C=8A, I_B=0.8A$			1.5

■ Other Characteristics (Ta=25°C unless otherwise noted)

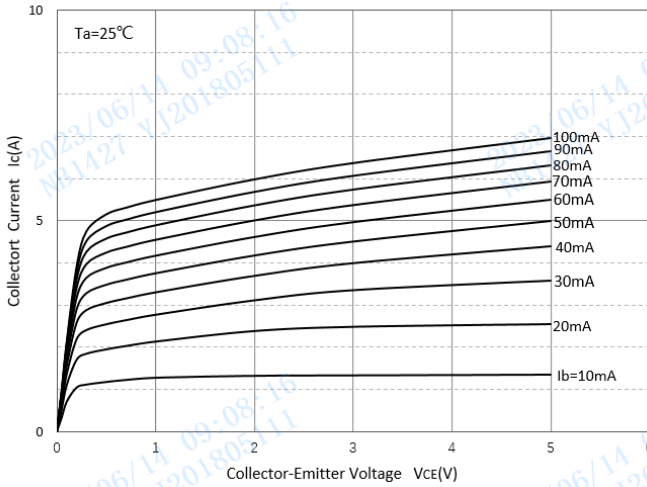
Item	Symbol	Unit	Conditions	Min	Typ	Max
Transition frequency	f_T	MHz	$V_{CE}=5V, I_C=1A$	10	-	-



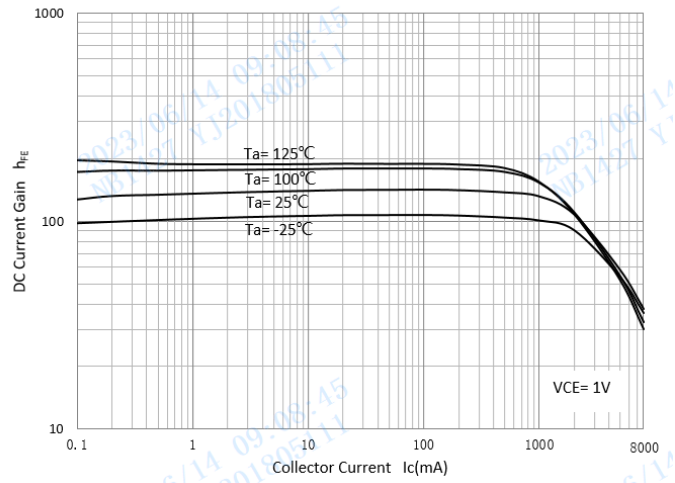
MJC44H11

■ Characteristics(Typical)

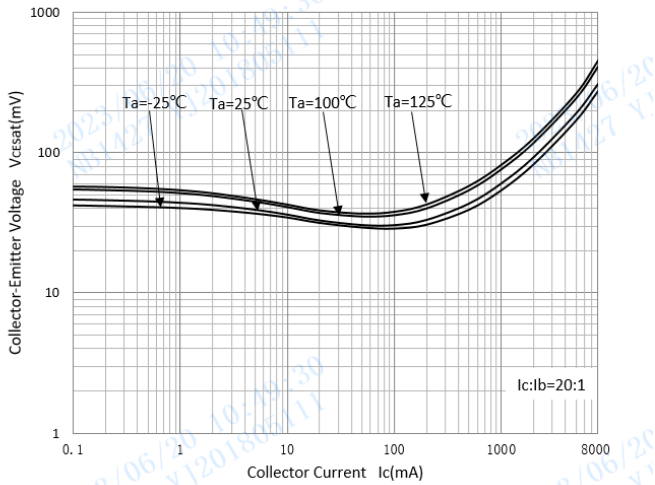
Static Characteristic



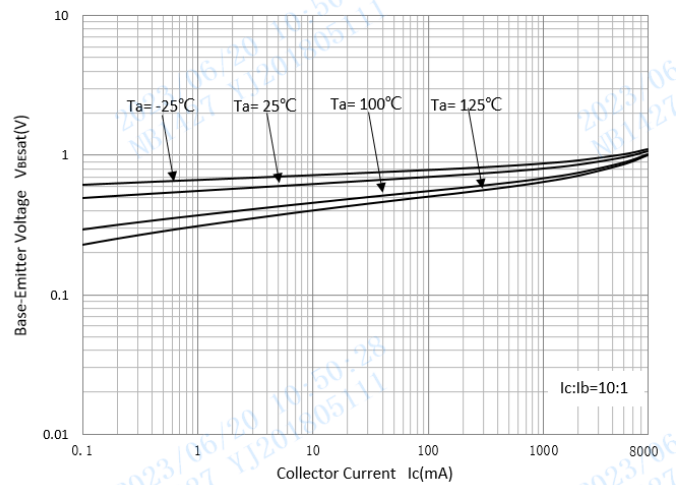
DC Current Gain



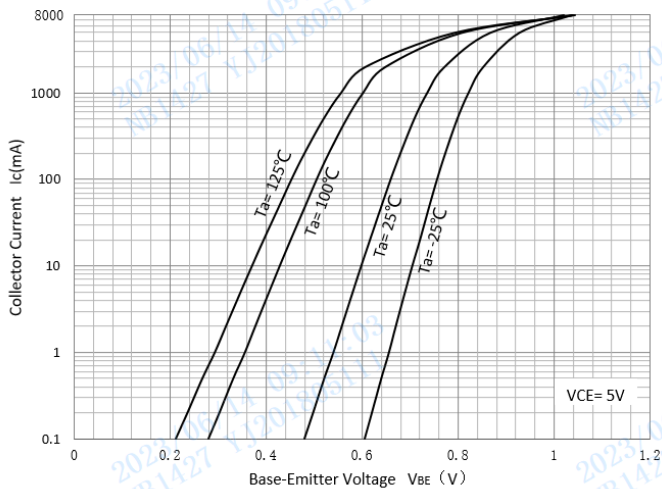
Collector-Emitter Saturation Voltage



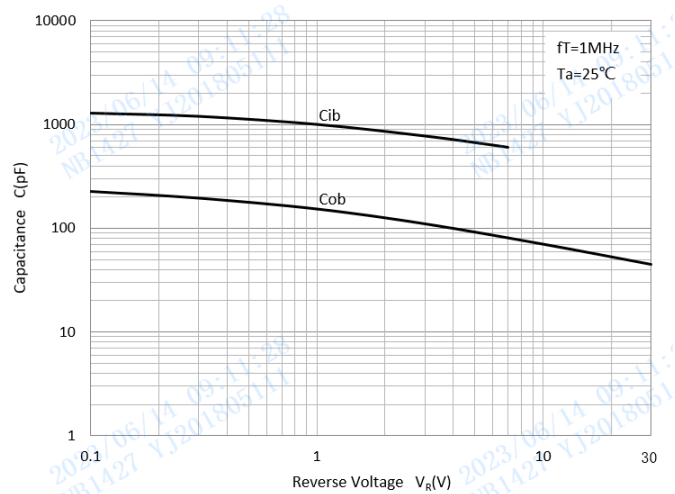
Base-Emitter Saturation Voltage



Base-Emitter On Voltage



Cob/Cib-V_{CB}/V_{EB}



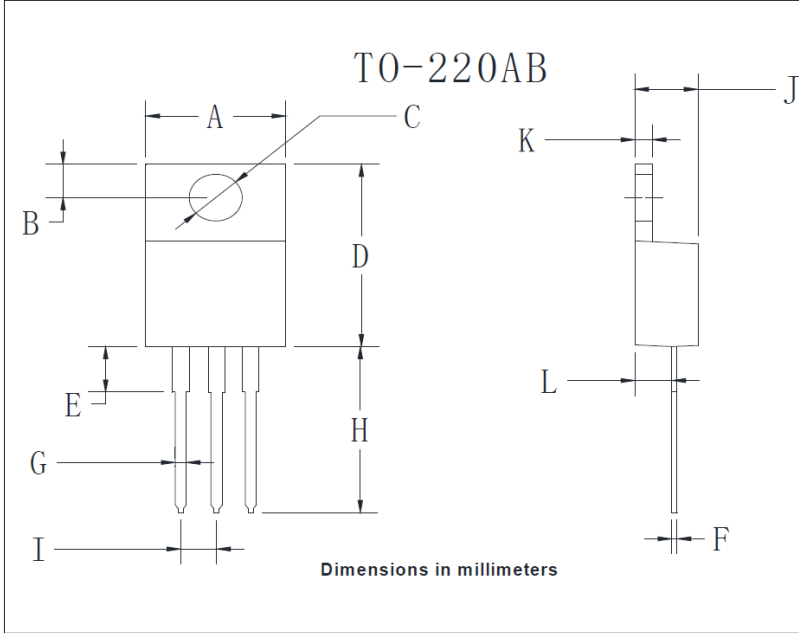


MJC44H11

■ Ordering Information (Example)

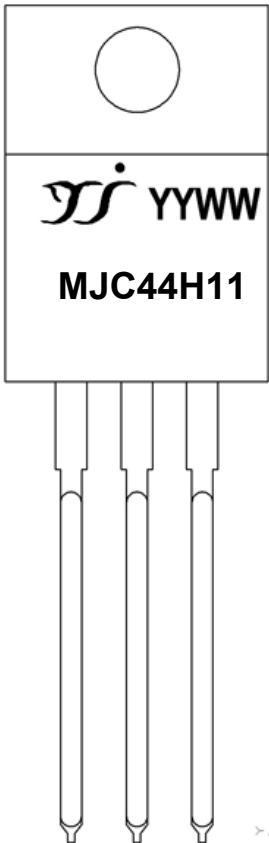
PREFERED P/N	PACKING CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MJC44H11	B1	50/Tube	1000	2000	Tube

■ TO-220AB Package information



TO-220AB		
Dim	Min	Max
A	9.95	10.35
B	2.55	2.95
C	3.8	4.0
D	14.95	15.25
E	3.75	4.25
F	0.26	0.5
G	0.68	0.94
H	13.4	13.9
I	2.35	2.65
J	4.38	4.78
K	1.14	1.4
L	2.37	2.79

■ Marking code



YangJie LOGO
 YYWW: YY, years; WW, week.
 For example, 24 represents 2024; 01 represents the first week of this year.
 MJC44H11: Product model.



MJC44H11

Disclaimer

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