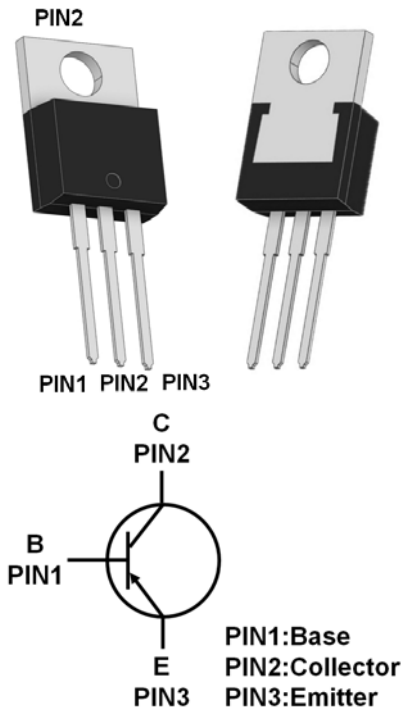


## PNP Silicon Power Transistors



### Features

- Epoxy Meets UL 94 V-0 Flammability Rating
- High thermal power dissipation capability
- Low collector emitter saturation voltage

### Applications

- Complement to MJC44H11
- Power management

### Mechanical Data

- Package: TO-220AB
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Unit Weight: 1.9g

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

Item	Symbol	Unit	Value
Device marking code			MJC45H11
Collector-base voltage	$V_{CBO}$	V	-100
Collector-emitter voltage	$V_{CEO}$	V	-80
Emitter-base voltage	$V_{EBO}$	V	-6
Collector current	$I_C$	A	-8
Power dissipation	$P_D$	W	1.25
Thermal resistance, junction-to-ambient (Note1)	$R_{thJA}$	°C/W	100
Junction temperature	$T_j$	°C	-55 to +150
Storage temperature	$T_{STG}$	°C	-55 to +150

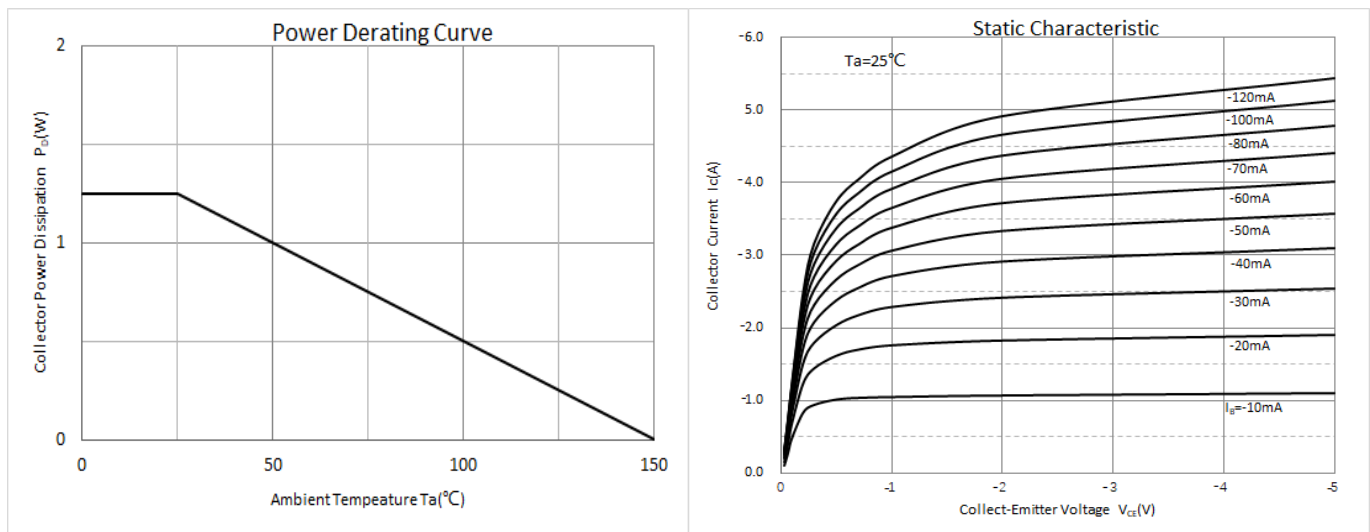
Note1: Device mounted on PCB with minimum recommended pad layout and additional heat sink (25mm x 23mm x 15mm) attached.



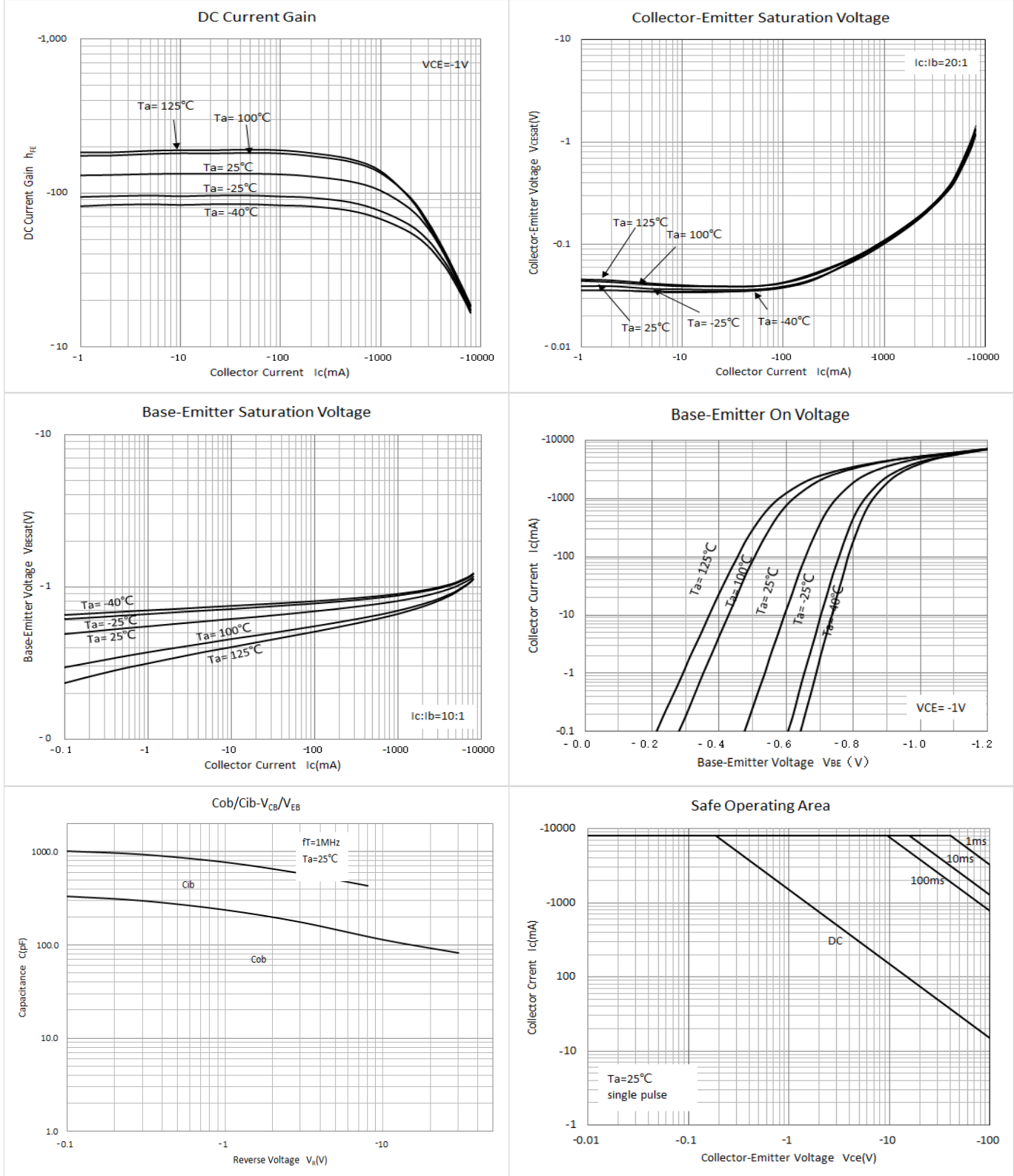
## ■ Electrical Characteristics (Ta=25°C unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	Typ	Max
Collector-base breakdown voltage	$V_{(BR)CBO}$	V	$I_C = -100\mu A, I_E = 0$	-100		
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	V	$I_C = -10mA, I_B = 0$	-80		
Emitter-base breakdown voltage	$V_{(BR)EBO}$	V	$I_E = -100\mu A, I_C = 0$	-6		
Collector-base cut-off current	$I_{CES}$	$\mu A$	$V_{CB} = -80V$			-1
Emitter-base cut-off current	$I_{EBO}$	$\mu A$	$V_{EB} = -10V$			-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	$I_C = -8A, I_B = -0.4A$			-1.0
Base-emitter saturation voltage	$V_{BE(sat)}$	V	$I_C = -8A, I_B = -0.8A$			-1.5
Collector-base output capacitance	Cob	pF	$V_{CB} = -10V, I_E = 0A, f = 1MHz$		113	

## ■ Characteristics(Typical)



## ■ Characteristics(Typical)

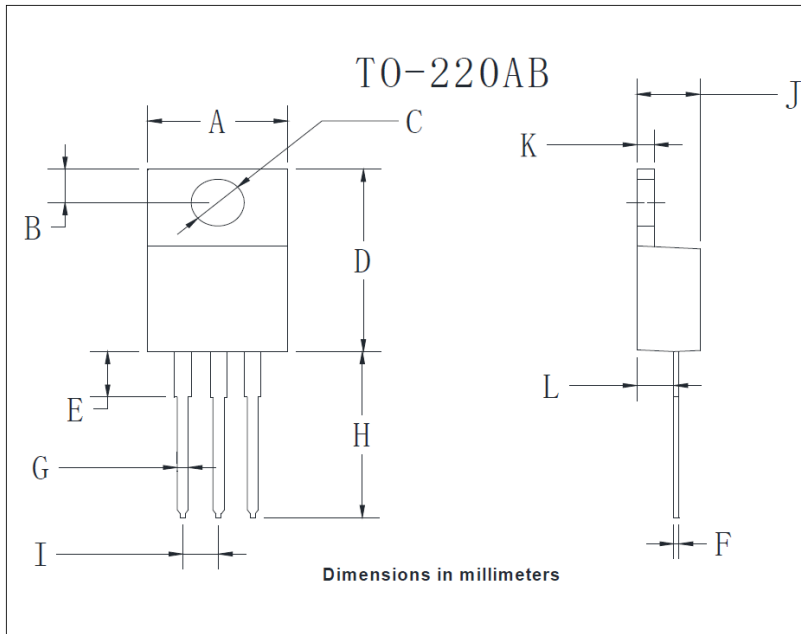




■ Ordering Information (Example)

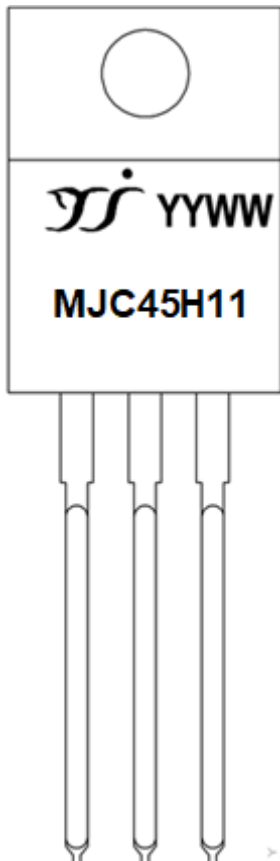
PREFERED P/N	PACKING CODE	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MJC45H11	B1	50/Tube	1000	5000	Tube

■ 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.  
MJC45H11: Product model.



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