



MMBTA44

NPN Silicon High Voltage Transistor

350mW

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Surface Mount SOT-23 Package
- 150°C Junction Temperature
- Halogen free available upon request by adding suffix "-HF"

Mechanical Data

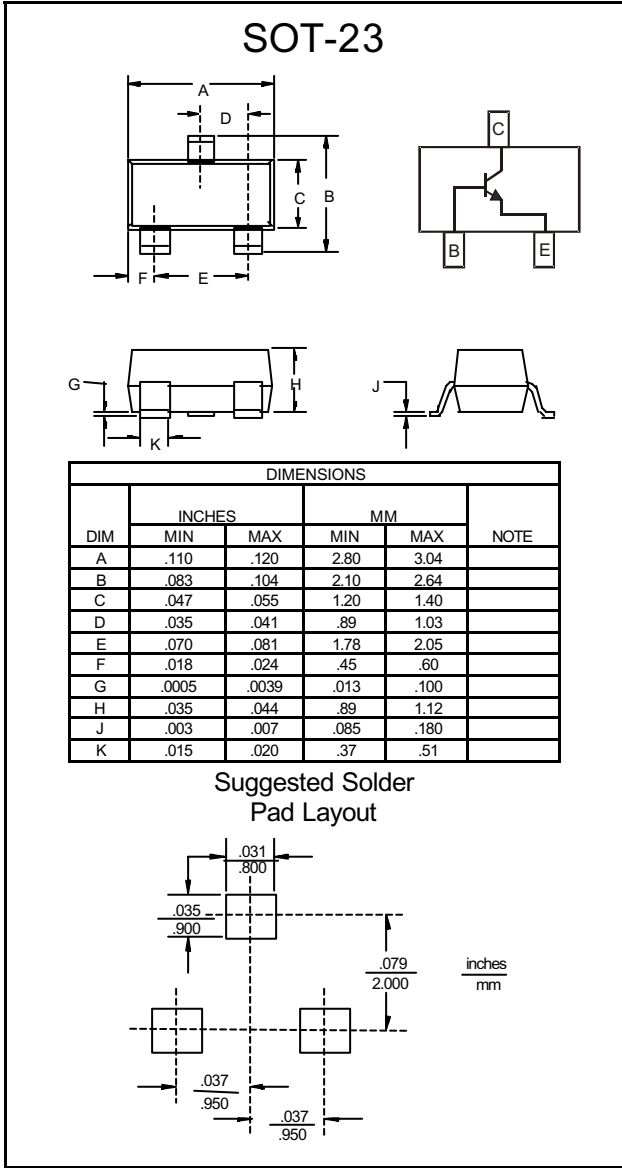
- Power dissipation: 0.35W
- Marking: 3D/A44

Maximum Ratings

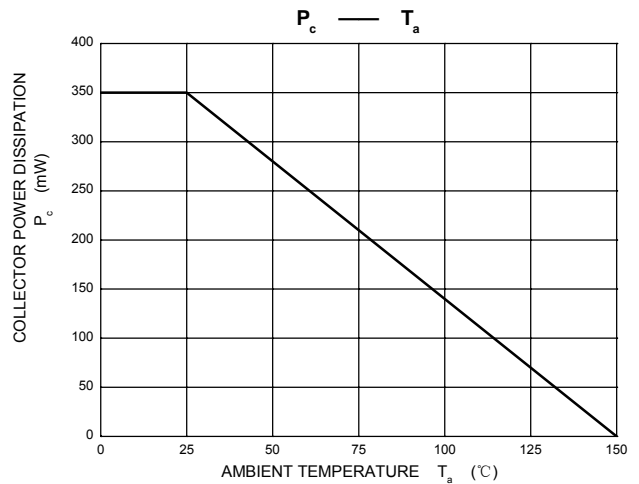
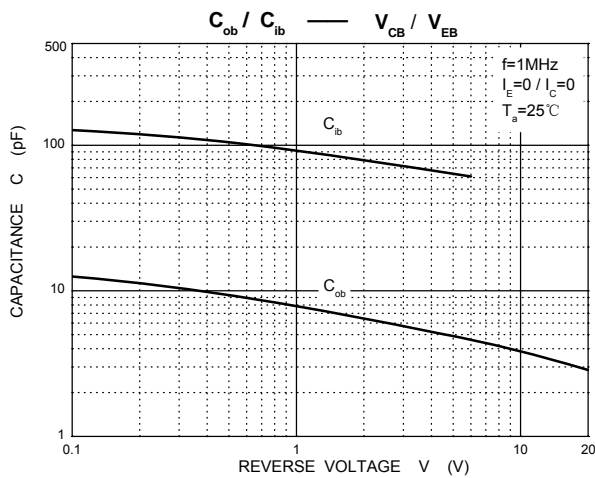
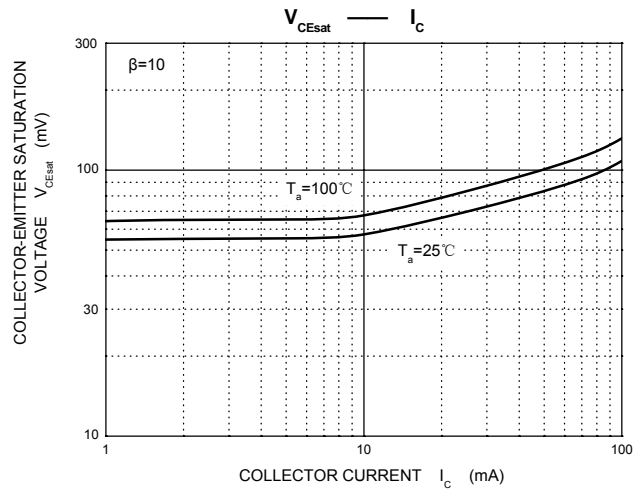
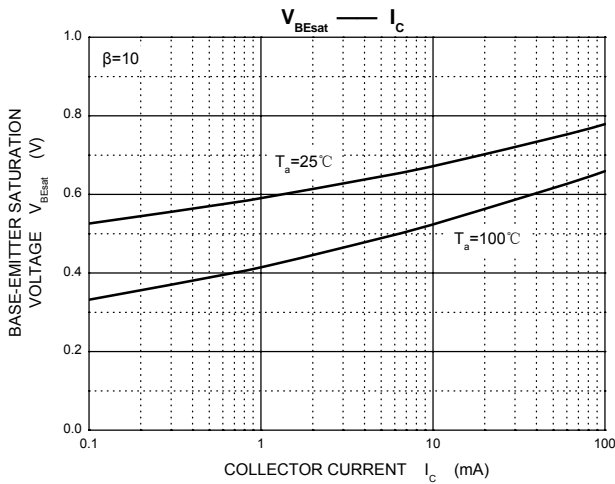
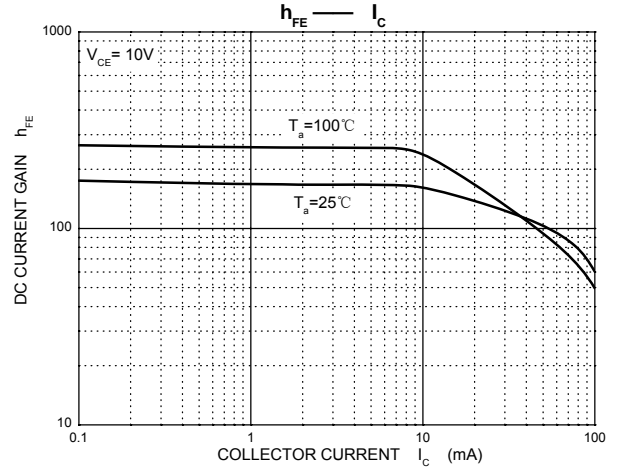
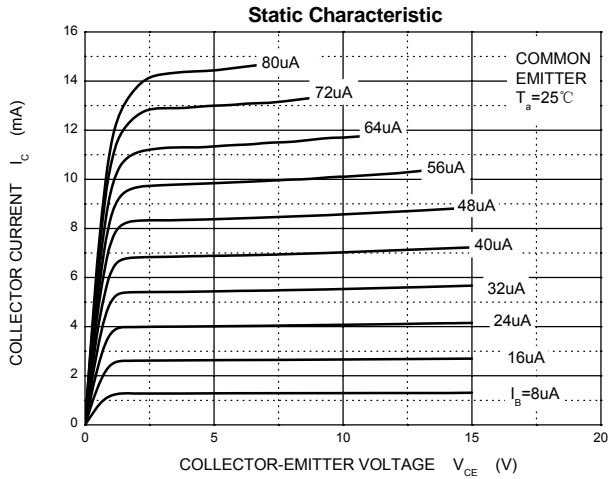
Symbol	Rating	Rating	Unit
V _{CEO}	Collector-Emitter Voltage	400	V
V _{CBO}	Collector-Base Voltage	500	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current	100	mA
P _C	Collector power dissipation	350	mW
T _J	Junction Temperature	-55 to +150	°C
T _{STG}	Storage Temperature	-55 to +150	°C

Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
I _{CBO}	Collector Cutoff Current (V _{CB} = 400Vdc, I _E =0)	---	---	100	nAdc
I _{EBO}	Emitter Cutoff Current (V _{EB} =4.0Vdc, I _C =0)	---	---	100	nAdc
BV _{CBO}	Collector-base breakdown voltage (I _C =100µAdc, I _E =0)	500	---	---	Vdc
BV _{CEO}	Collector-emitter breakdown voltage (I _C =1mAdc, I _B =0)	400	---	---	Vdc
BV _{EBO}	Emitter-base breakdown voltage (I _E =10µAdc, I _C =0)	6	---	---	Vdc
h _{FE}	DC Current Gain (I _C =1mAdc, V _{CE} =10Vdc) (I _C =10mAdc, V _{CE} =10Vdc) (I _C =50mAdc, V _{CE} =10Vdc) (I _C =100mAdc, V _{CE} =10Vdc)	40 50 45 40	---	---	---
V _{CE(sat)}	Collector Saturation Voltage (I _C =1mAdc, I _B =0.1mAdc) (I _C =50mAdc, I _B =5mA)	---	---	0.4 0.75	V
V _{BE(sat)}	Collector Saturation Voltage (I _C =10mAdc, I _B =1mAdc)	---	---	0.75	V
f _T	Gain Bandwidth product (V _{CE} =20Vdc, I _C =10mAdc, f=30MHz)	---	50	---	MHz



Typical Characteristics





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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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