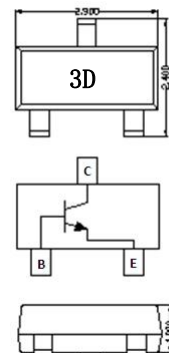


- ◇ Capable of 350mWatts of Power Dissipation
- ◇ Operating and Storage Junction Temperatures: -55°C to 150°C
- ◇ Surface Mount SOT-23 Package
- ◇ RoHS compliant / Green EMC
- ◇ Device Marking Code

SOT23 Unit:mm



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

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	400	V
V _{CE0}	Collector-Emitter Voltage	400	V
V _{EB0}	Emitter-Base Voltage	6	V
I _c	Collector Current	200	mA
P _c	Collector Power Dissipation	350	mW
R _{θJA}	Thermal Resistance From Junction To Ambient	357	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

Electrical Characteristics @ 25° C Unless Otherwise Specified

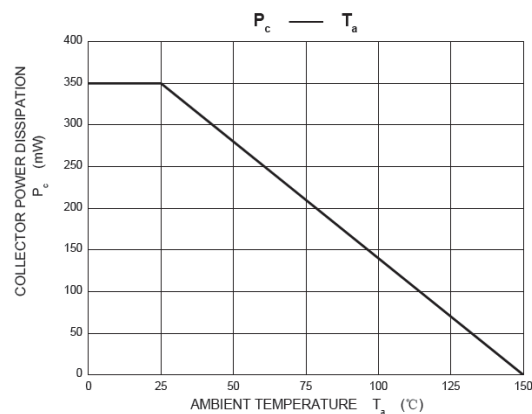
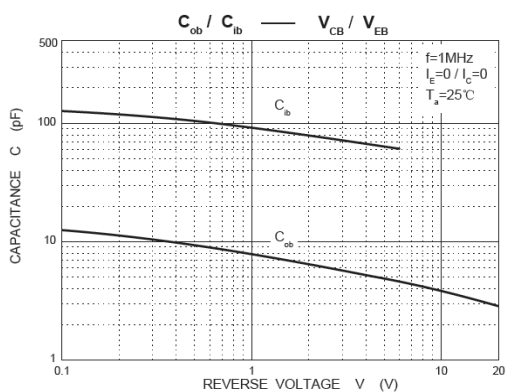
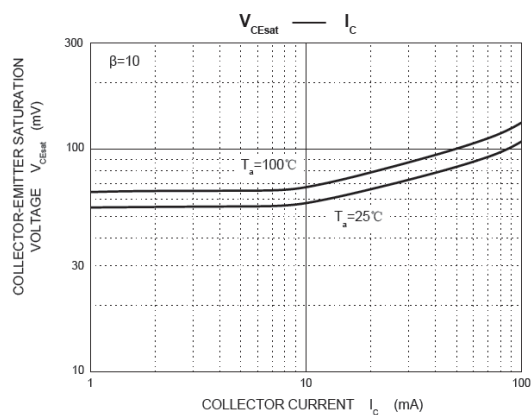
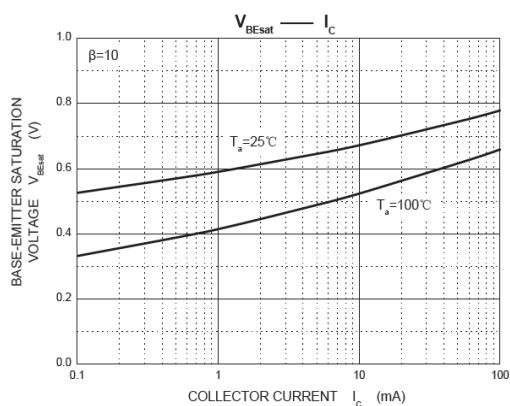
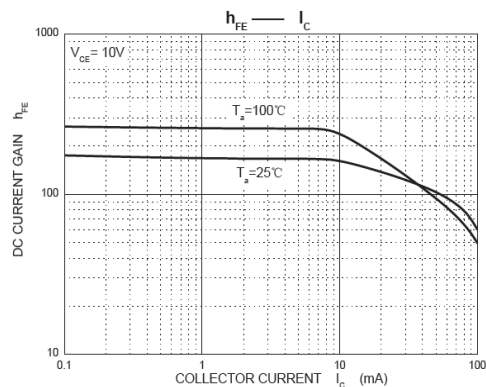
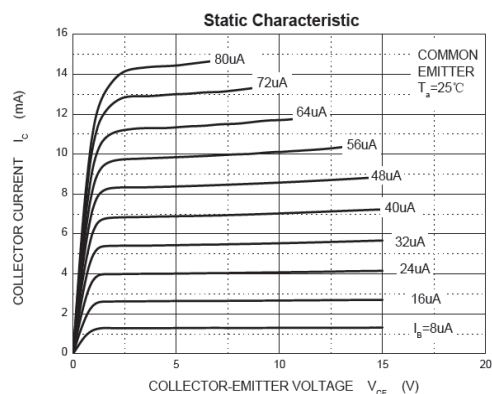
Symbol	Parameter	Test Conditions	Min	Typ	Max	Units
V _{CE0} *	Collector-Emitter Breakdown Voltage	I _c =1mA, I _B =0	400			V
V _{CB0}	Collector-Base Breakdown Voltage	I _c =100μA, I _E =0	400			V
V _{EB0}	Emitter-Base Breakdown Voltage	I _E =10μA, I _c =0	6.0			V
I _{CB0}	Collector cut-off current	V _{CB} =400V, I _E =0			100	nA
I _{EB0}	Collector Cutoff Current	V _{EB} =4V, I _c =0			100	nA
h _{FE} *	DC Current Gain	I _c =1.0mA, V _{CE} =10V	40			
		I _c =10mA, V _{CE} =10V	50		200	
		I _c =50mA, V _{CE} =10V	45			
		I _c =100mA, V _{CE} =10V	40			
V _{CE(sat)} *	Collector-Emitter Saturation Voltage	I _c =1mA, I _B =0.1mA			0.4	V
		I _c =10mA, I _B =1mA			0.5	
		I _c =50mA, I _B =5mA			0.75	
V _{BE(sat)} *	Base-Emitter Saturation Voltage	I _c =10mA, I _B =1mA			0.75	V
C _{ob}	Collector-Base Capacitance	V _{CB} =20V, I _E =0, f=1.0MHz			7	PF
C _{ib}	Emitter-Base Capacitance	V _{BE} =0.5V, I _C =0, f=1.0MHz			130	PF

*Pulse test: pulse width ≤300μs, duty cycle≤2.0%.

Ordering Information

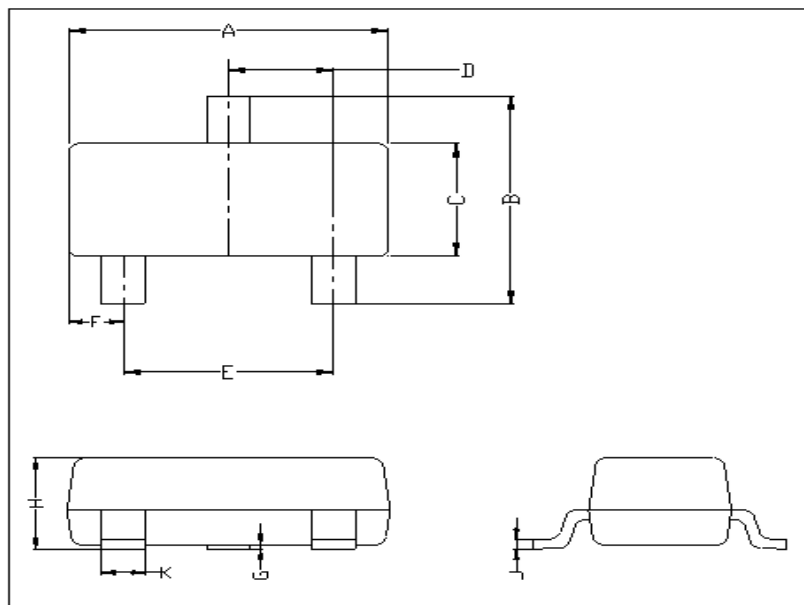
Device	Package	Shipping	Tape wide	Emboss pitch	Tape specification	Notes
MMBTA44	SOT23	Tape & Reel 3000pcs /7" Reel	8mm	4mm	Conductive	

Typical Characteristics



Package Dimensions

Package Outline : SOT23



SOT23 Package Outline

Symbol	Dimensions in mm	
	Min.	Max.
A	2.800	3.040
B	2.100	2.640
C	1.200	1.400
D	0.890	1.030
E	1.780	2.050
F	0.450	0.600
G	0.013	0.100
H	0.900	1.110
J	0.090	0.180
K	0.370	0.510

Note:

1. Halogen free ,EMC
2. Pb free solder
3. Lead thickness solder plating
4. Lead frame CAC-5
5. Other Tolerance ± 0.05
6. Dimensions are exclusive of Burrs Mold Flash and Tie Bar extrusions
7. Unit :mm