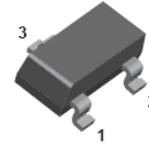


FEATURES

- Epitaxial planar die construction.
- Complementary NPN type available (MMBTA42).
- Ideal for medium power amplification and switching.

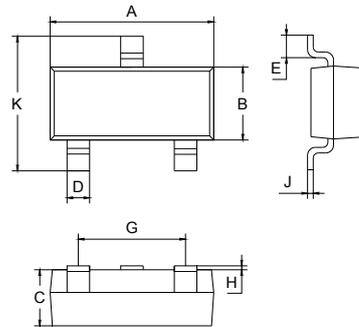


1. BASE
2. EMITTER
3. COLLECTOR

APPLICATIONS

- High voltage driver applications.

ORDERING INFORMATION



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

Type No.	Marking	Package Code
MMBTA92	2D	SOT-23

MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

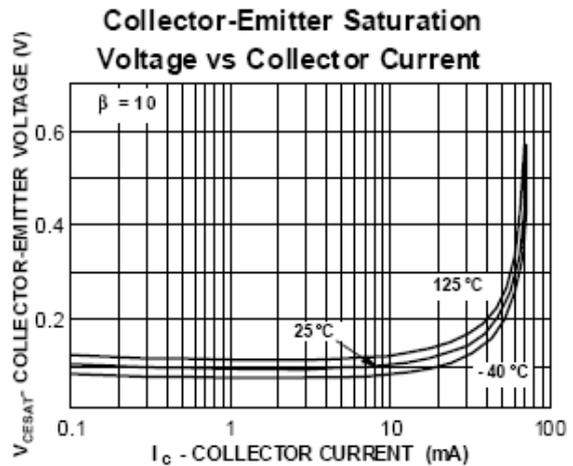
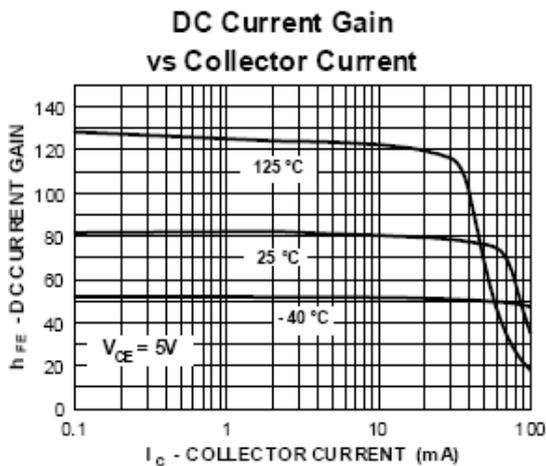
Symbol	Parameter	Value	UNIT
V_{CBO}	collector-base voltage	-300	V
V_{CEO}	collector-emitter voltage	-300	V
V_{EBO}	emitter-base voltage	-5	V
I_c	collector current (DC)	-0.5	A
P_C	Collector dissipation	0.35	W
T_j, T_{stg}	junction and storage temperature	-55 to +150	$^\circ\text{C}$

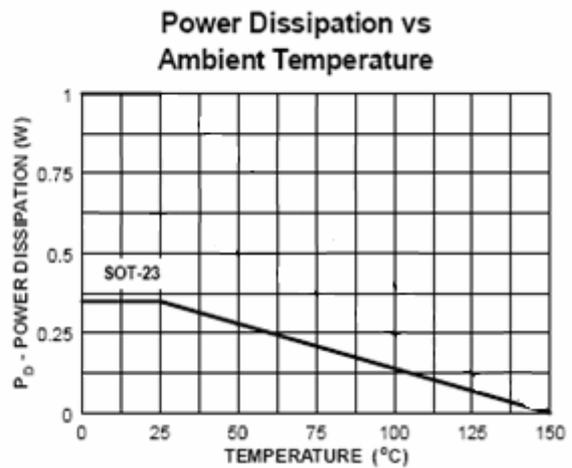
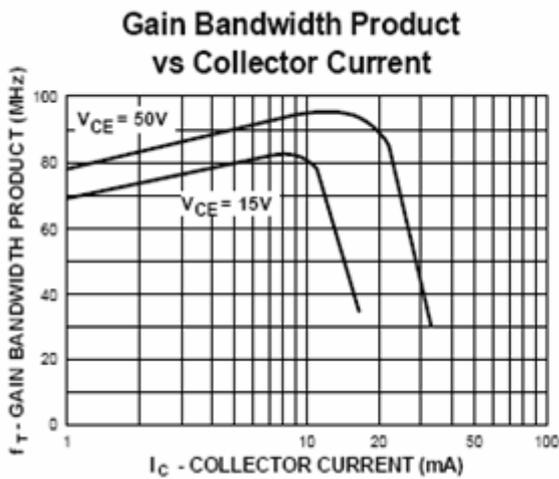
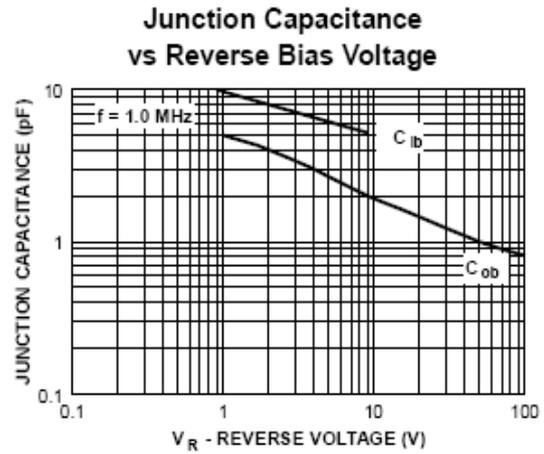
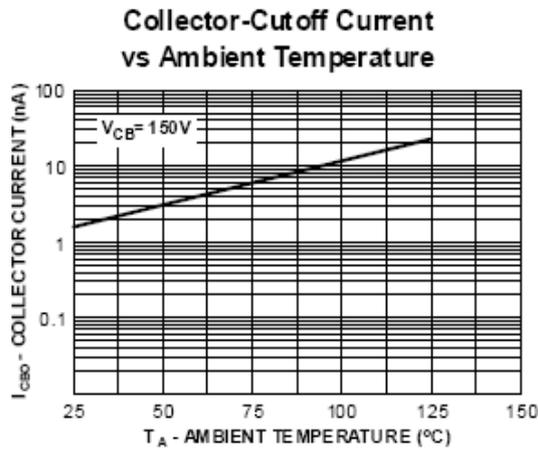
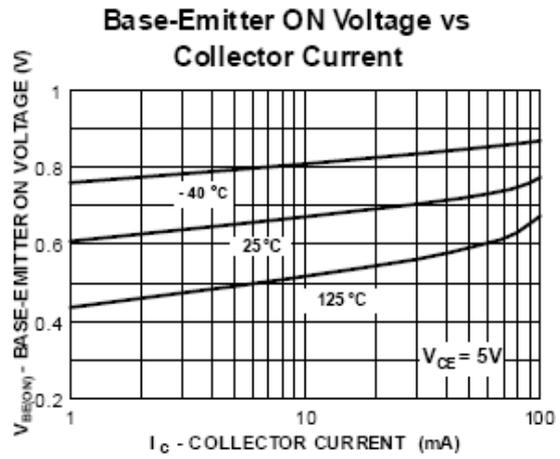
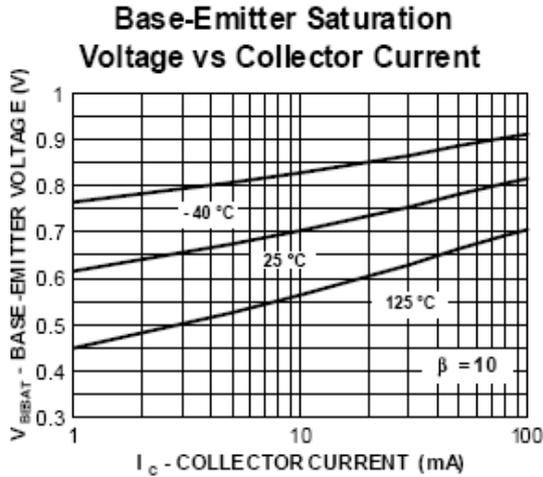


ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Test conditions	MIN.	MAX.	UNIT
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=-100\mu\text{A}, I_E=0$	-300		
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=-1\text{mA}, I_B=0$	-300		
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=-100\mu\text{A}, I_C=0$	-5		
I_{CBO}	collector cut-off current	$I_E = 0; V_{CB} = -200\text{V}$	-	-0.25	μA
I_{EBO}	emitter cut-off current	$I_C = 0; V_{EB} = -3\text{V}$	-	-0.1	μA
h_{FE}	DC current gain	$V_{CE} = -10\text{V}; I_C = -1\text{mA}$	25		
		$V_{CE} = -10\text{V}; I_C = -10\text{mA}$	40		
		$V_{CE} = -10\text{V}; I_C = -30\text{mA}$	25		
$V_{CE(sat)}$	collector-emitter saturation voltage	$I_C = -20\text{mA}; I_B = -2\text{mA}$	-	-0.5	V
$V_{BE(sat)}$	base-emitter saturation voltage	$I_C = -20\text{mA}; I_B = -2\text{mA}$	-	-0.9	V
C_{ob}	Collector output capacitance	$V_{CB}=-20\text{V}, f=1.0\text{MHz}$	-	6.0	pF
f_T	transition frequency	$I_C = -10\text{mA}; V_{CE} = -20\text{V}; f = 100\text{MHz}$	50	-	MHz

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified





Device	Package	Shipping
MMBTA92	SOT-23	3000/Tape&Reel