

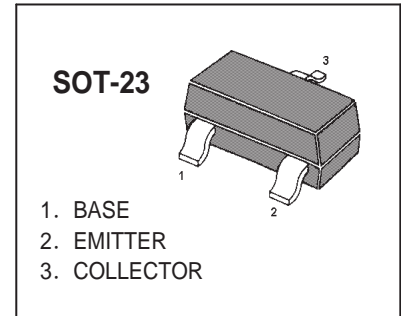
SOT-23 Plastic-Encapsulate Transistors

MMBTA42 TRANSISTOR (NPN)

FEATURES

- High breakdown voltage
- Low collector-emitter saturation voltage
- Complementary to MMBTA92 (PNP)

Marking: 1D

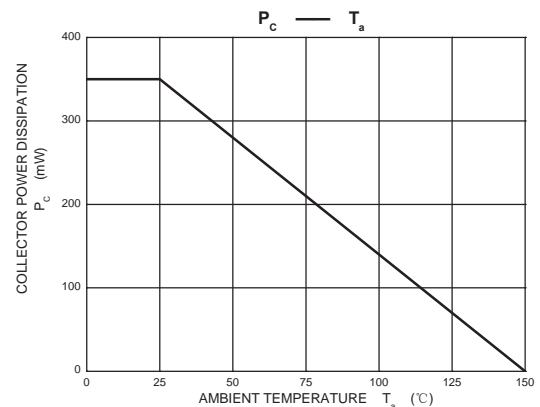
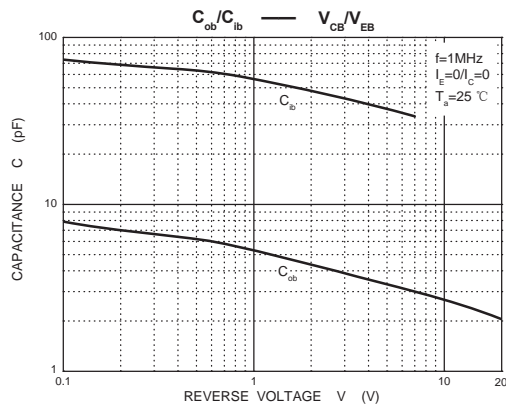
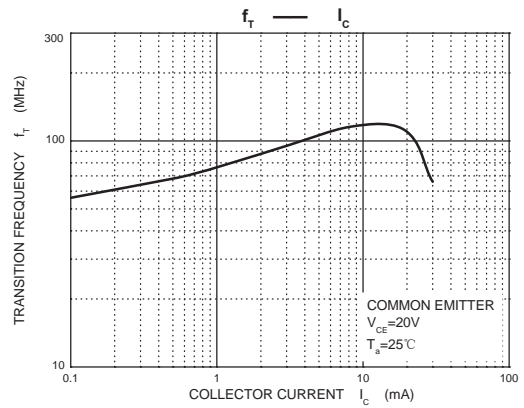
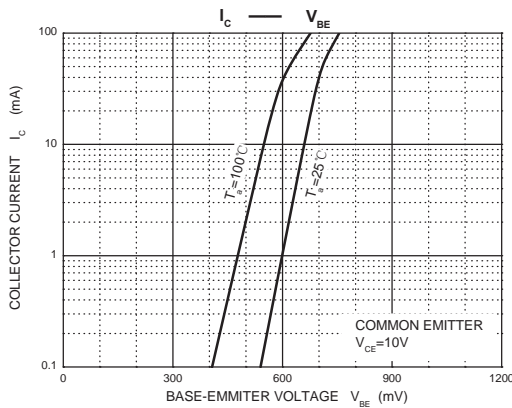
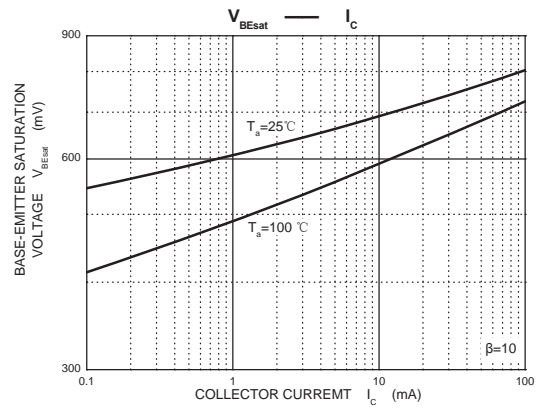
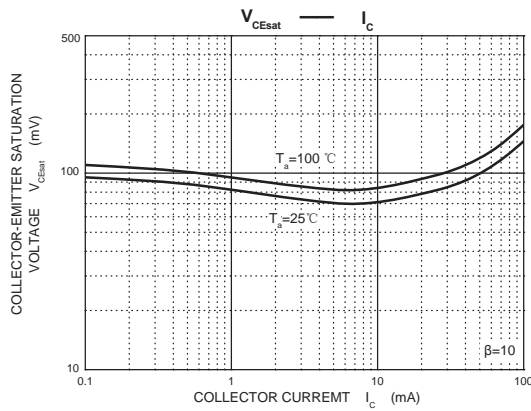
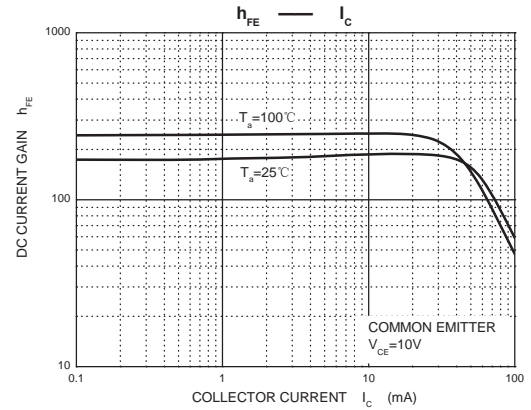
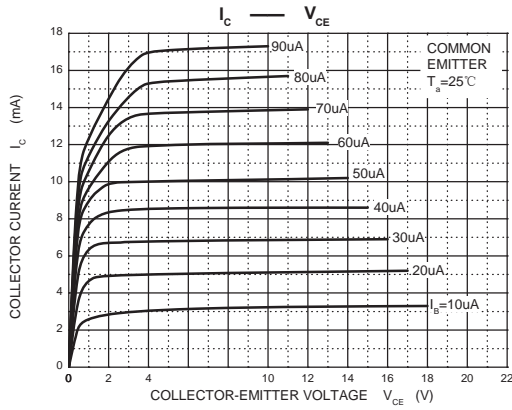


MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	
V _{CB0}	Collector-Base Voltage	300	V
V _{CEO}	Collector-Emitter Voltage	300	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current -Continuous	0.3	A
I _{CM}	Collector Current-Peak	0.5	A
P _C	Collector Power dissipation	0.35	W
R _{θJA}	Thermal Resistance, junction to Ambient	357	°C/W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

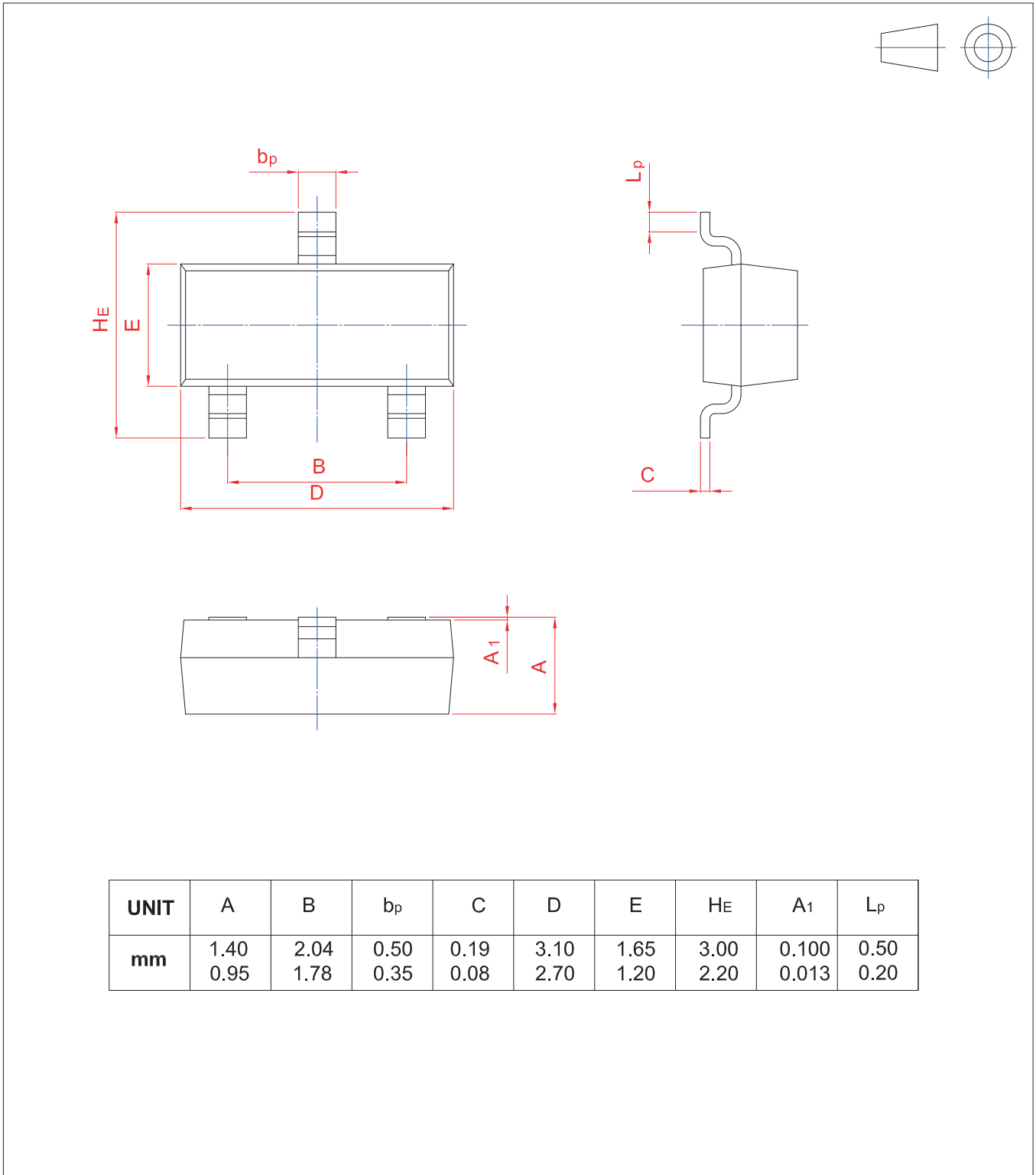
Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = 100μA, I _E =0	300		V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = 1mA, I _B =0	300		V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = 100μA, I _C =0	5		V
Collector cut-off current	I _{CBO}	V _{CB} =200V, I _E =0		0.25	μA
Emitter cut-off current	I _{EBO}	V _{EB} = 5V, I _C =0		0.1	μA
DC current gain	h _{FE(1)}	V _{CE} = 10V, I _C = 1mA	60		
	h _{FE(2)}	V _{CE} = 10V, I _C =10mA	100	200	
	h _{FE(3)}	V _{CE} =10V, I _C =30mA	60		
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =20mA, I _B = 2mA		0.2	
Base-emitter saturation voltage	V _{BE(sat)}	I _C = 20mA, I _B =2mA		0.9	
Transition frequency	f _T	V _{CE} = 20V, I _C = 10mA, f=30MHz	50		MHz



PACKAGE OUTLINE

Plastic surface mounted package; 3 leads

SOT-23



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bipolar Transistors - BJT category](#):

Click to view products by [Shikues manufacturer](#):

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MMBT-2369-TR](#) [BC546/116](#) [BC557/116](#) [BSW67A](#) [NJVMJD148T4G](#) [NTE123AP-10](#) [NTE153MCP](#) [NTE16](#)
[NTE195A](#) [NTE92](#) [2N4401-A](#) [2N6728](#) [2SA1419T-TD-H](#) [2SA2126-E](#) [2SB1204S-TL-E](#) [2SC2712S-GR,LF](#) [SP000011176](#) [2N2907A](#) [2N3904-](#)
[NS](#) [2N5769](#) [2SC2412KT146S](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#) [MJE340](#) [Jantx2N5416](#) [US6T6TR](#) [NJL0281DG](#) [732314D](#) [CPH3121-TL-E](#)
[CPH6021-TL-H](#) [873787E](#) [IMZ2AT108](#) [MMST8098T146](#) [UMX21NTR](#) [MCH6102-TL-E](#) [NJL0302DG](#) [30A02MH-TL-E](#) [NTE13](#) [NTE26](#)
[NTE282](#) [NTE323](#) [NTE350](#) [NTE81](#) [STX83003-AP](#) [JANTX2N2920L](#) [JANSR2N2222AUB](#) [CMLT3946EG TR](#) [2SA1371D-AE](#)