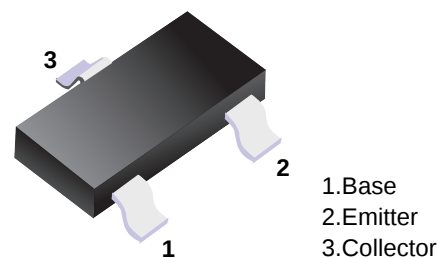


MMBTA92

PNP Transistors

■ Features

- High voltage transistor
- Low collector-emitter saturation voltage
- Complementary to MMBTA42 (NPN)



■ Simplified outline(SOT-23)

■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V _{CB0}	-300	V
Collector - Emitter Voltage	V _{CEO}	-300	
Emitter - Base Voltage	V _{EB0}	-5	
Collector Current - Continuous	I _c	-500	mA
Collector Power Dissipation	P _c	350	mW
Thermal Resistance Junction to Ambient	R _{θJA}	417	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature range	T _{stg}	-55 to 150	

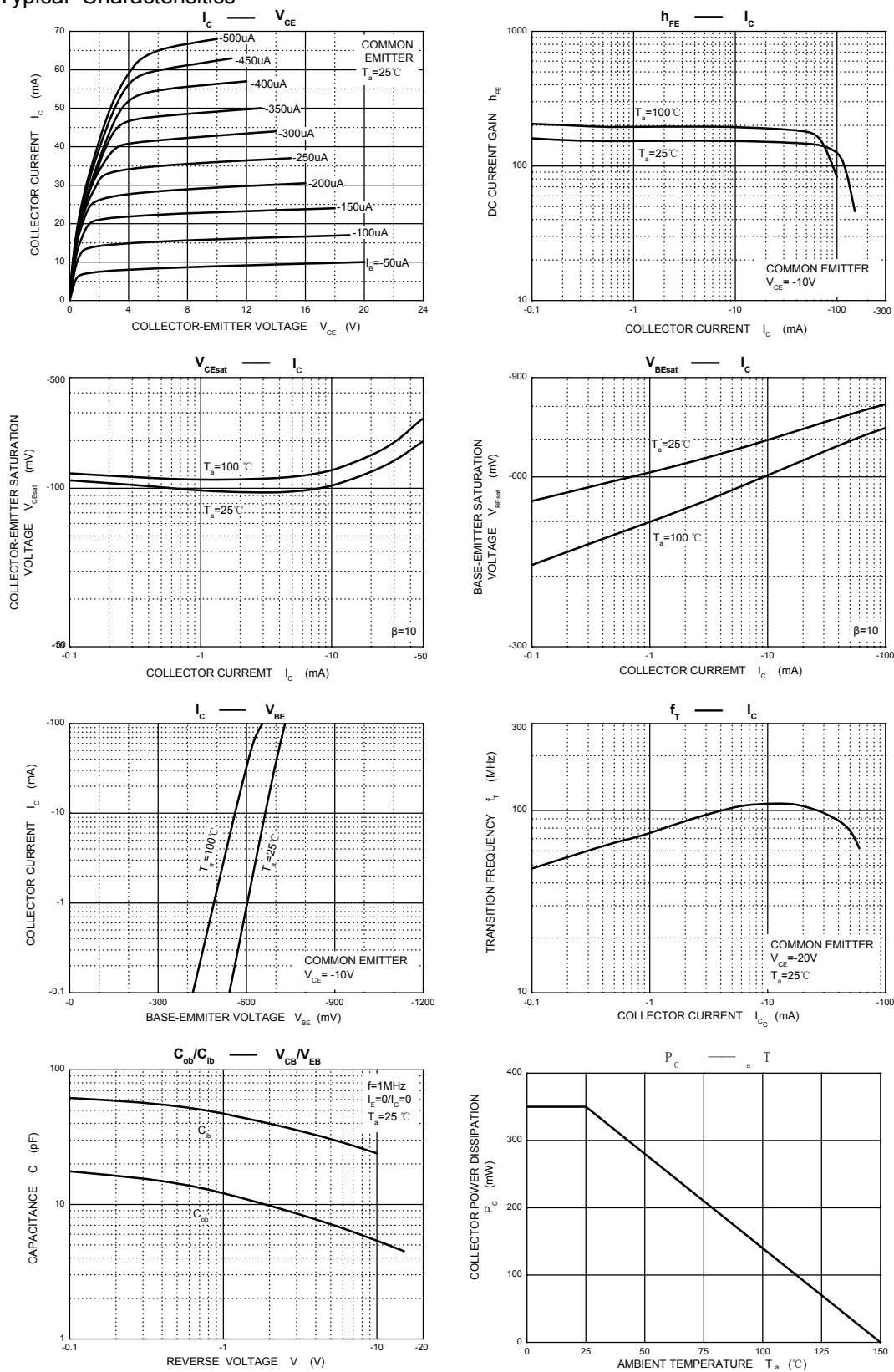
■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V _{CB0}	I _c = -100 μA, I _E =0	-300			V
Collector- emitter breakdown voltage	V _{CEO}	I _c = -1 mA, I _B =0	-300			
Emitter - base breakdown voltage	V _{EB0}	I _E = -100 μA, I _c =0	-5			
Collector-base cut-off current	I _{CB0}	V _{CB} = -200 V, I _E =0			-0.25	uA
Emitter cut-off current	I _{EB0}	V _{EB} = -5V, I _c =0			-0.1	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c =-20 mA, I _B = -2mA			-0.2	V
Base - emitter saturation voltage	V _{BE(sat)}	I _c = -20mA, I _B = -2mA			-0.9	
DC current gain	h _{fe} (1)	V _{CE} = -10V, I _c = -1mA	60			
	h _{fe} (2)	V _{CE} = -10V, I _c = -10mA	100		300	
	h _{fe} (3)	V _{CE} = -10V, I _c =-30mA	60			
Transition frequency	f _T	V _{CE} = -20V, I _c = -10mA, f=30MHz	50			MHz

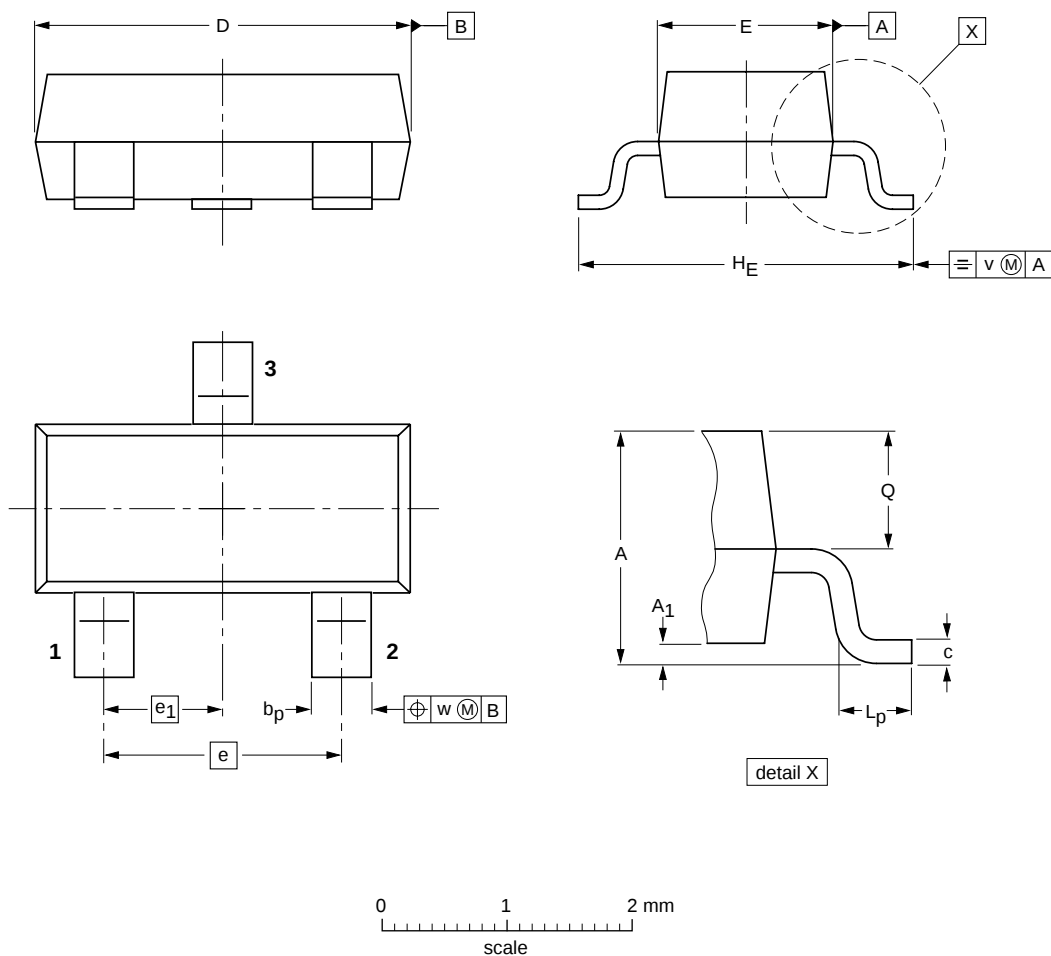
■ Classification of h_{fe}(2)

Type	MMBTA92	MMBTA92-L
Range	100-300	100-200
Marking	2D	

■ Typical Characteristics



■ SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max.	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1