Tonghua Electronics

MMBTA92 (PNP)

FEATURES

High voltage transistor

MARKING: 2D

1. BASE
2. EMITTER
3. COLLECTO

SOT-23

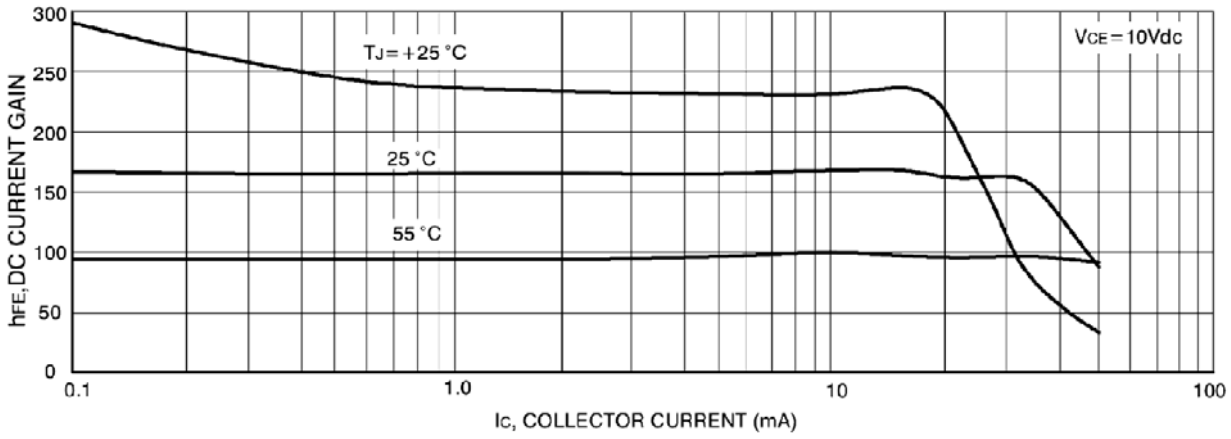
MAXIMUM RATINGS (TA=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-300	V
Collector-Emitter Voltage	V_{CEO}	-300	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current -Continuous	I_C	-500	mA
Collector Power Dissipation	P_C	0.3	W
Junction Temperature	T_J	150	℃
Storage Temperature	Tstg	-55 to +150	℃
Thermal Resistance, junction to Ambient	$R_{\Theta JA}$	410	℃/mW

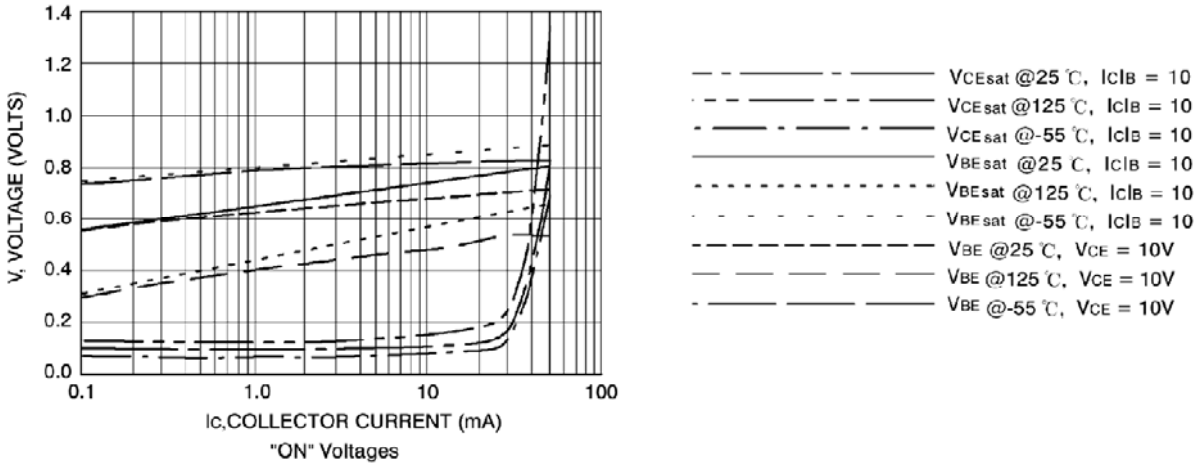
ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	VCBO	IC= -100μA, IE=0	-300		V
Collector-emitter breakdown voltage	VCEO	IC= -1mA, IB=0	-300		V
Emitter-base breakdown voltage	VEBO	IE= -100μA, IC=0	-5		V
Collector cut-off current	ICB	VCB=-200V, IE=0		-0.25	μA
Emitter cut-off current	IEB	VEB= -5V, IC=0		-0.1	μA
DC current gain	hFE(1)	VCE= -10V, IC= -1mA	60		
	hFE(2)	VCE= -10V, IC=-10mA	100	200	
	hFE(3)	VCE= -10V, IC=-30mA	60		
Collector-emitter saturation voltage	VCE(sat)	IC=-20mA, IB= -2mA		-0.2	V
Base-emitter saturation voltage	VBE(sat)	IC= -20mA, IB= -2mA		-0.9	V
Transition frequency	fT	VCE=-20V, IC= -10mA f=30MHz	50		MHz

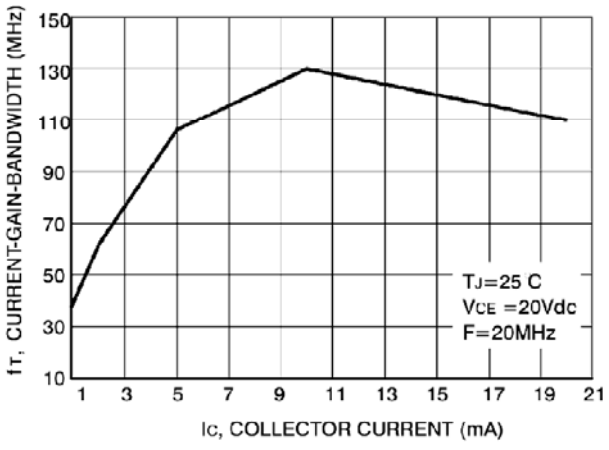
MMBTA92 Typical Characteristics



DC Current Gain



"ON" Voltages



Current–Gain — Bandwidth