

FEATURES

High voltage transistor

MARKING: 2D

MMBTA92 (PNP)
MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current -Continuous	I_C	150	mA
Collector Power Dissipation	P_C	0.4	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55 to +150	°C
Thermal Resistance, junction to Ambient	R_{JA}	410	°C/mW


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

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C = -100\mu A, I_E = 0$	-300		V
Collector-emitter breakdown voltage	V_{CEO}	$I_C = -1mA, I_B = 0$	-300		V
Emitter-base breakdown voltage	V_{EBO}	$I_E = -100\mu A, I_C = 0$	-5		V
Collector cut-off current	I_{CB}	$V_{CB} = -200V, I_E = 0$		-0.25	μA
Emitter cut-off current	I_{EB}	$V_{EB} = -5V, I_C = 0$		-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	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -20mA, I_B = -2mA$		-0.9	V
Transition frequency	f_T	$V_{CE} = -20V, I_C = -10mA$ $f = 30MHz$	50		MHz

MMBTA92 Typical Characteristics

