

■ PNP Transistors

■ Features

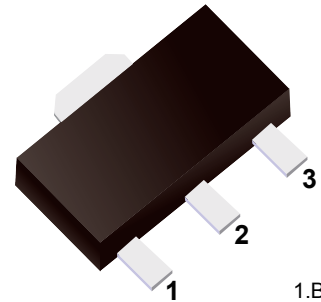
- High voltage, low saturation voltage, low collector output capacitance, complementary pair with MMBTA42



■ Applications

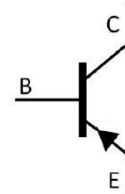
- High voltage control circuit.

Marking	A92
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1.Base
2.Collector
3.Emitter

■ Simplified outline(SOT-89)

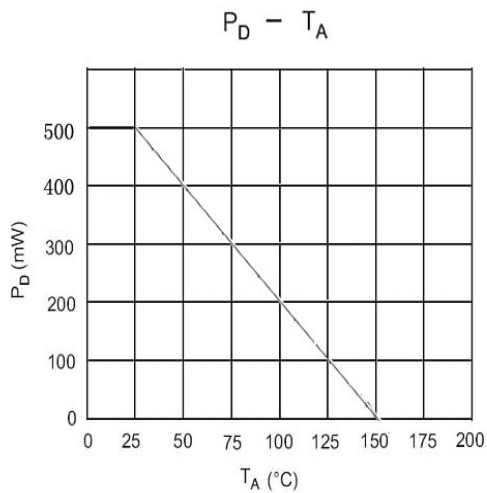
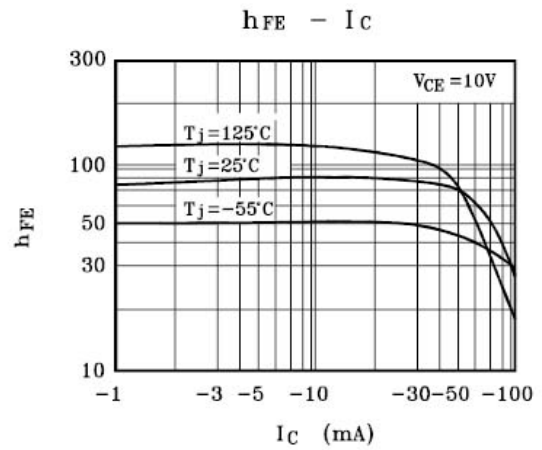
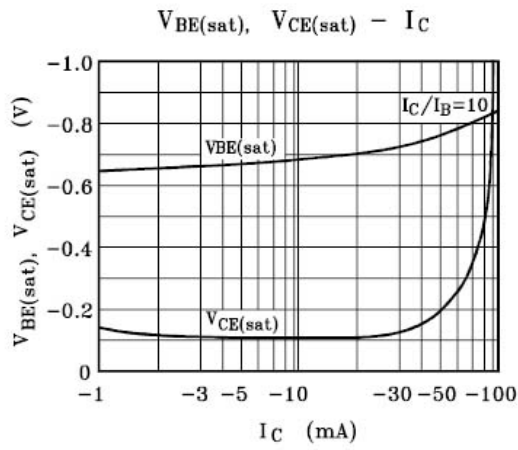
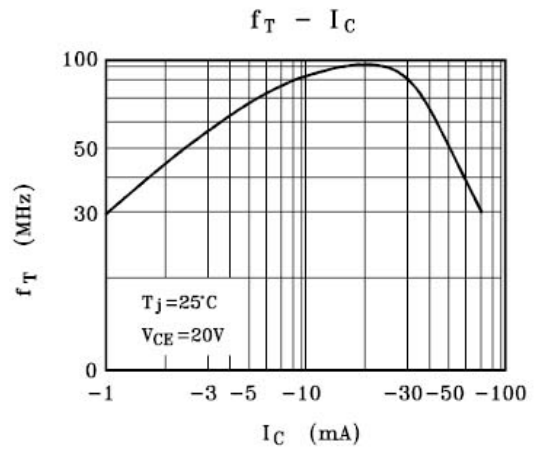
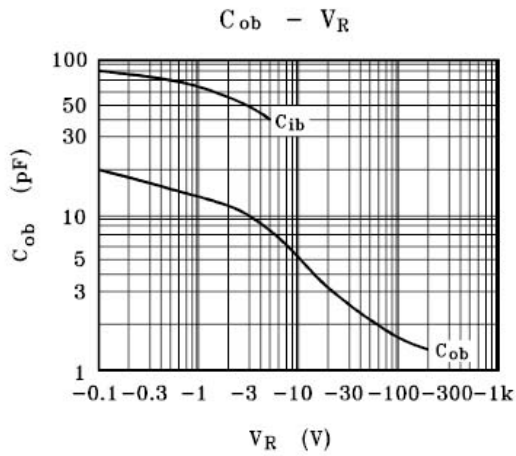


■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-300	V
Collector to Emitter Voltage	V_{CEO}	-300	V
Emitter to Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-500	mA
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

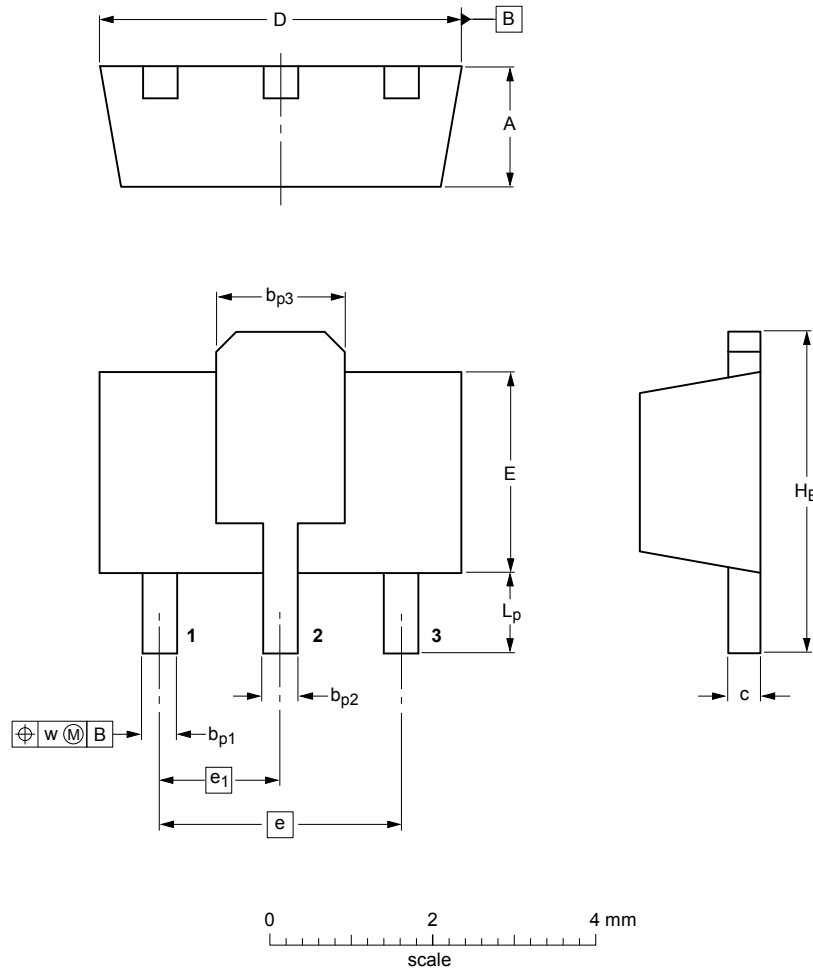
■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C = -100\mu A$ $I_E = 0$	-300			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C = -1.0mA$ $I_B = 0$	-300			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E = -100\mu A$ $I_C = 0$	-5.0			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -200V$ $I_E = 0$			-0.25	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{BE} = -3.0V$ $I_C = 0$			-0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE} = -10V$ $I_C = -10mA$	40			
	$h_{FE(2)}$	$V_{CE} = -10V$ $I_C = -30mA$	25			
	$h_{FE(3)}$	$V_{CE} = -10V$ $I_C = -1.0mA$	25			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -20mA$ $I_B = -2.0mA$			-0.5	V
Emitter to Base Saturation Voltage	$V_{BE(sat)}$	$I_C = -20mA$ $I_B = -2.0mA$			-0.9	V
Transition Frequency	f_T	$V_{CE} = -20V$ $f = 100MHz$ $I_C = -10mA$	50			MHz
Collector-Base Capacitance	C_{cb}	$V_{CB} = -20V$ $f = 1.0MHz$ $I_E = 0$			6.0	pF



Package Outline

SOT-89



DIMENSIONS (mm are the original dimensions)

UNIT	A	b_{p1}	b_{p2}	b_{p3}	c	D	E	e	e_1	H_E	L_p	w
mm	1.6 1.4	0.48 0.35	0.53 0.40	1.8 1.4	0.44 0.23	4.6 4.4	2.6 2.4	3.0	1.5	4.25 3.75	1.2 0.8	0.13

Summary of Packing Options

Package	Package Description	Packing Quantity	Industry Standard
SOT-89	Tape/Reel, 7" reel	1000	EIA-481-1