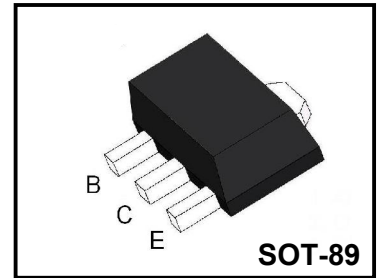


PNP Plastic-Encapsulate Transistors

Features

- ◆Adoption of FBET, MBIT processes.
- ◆High breakdown voltage and large current capacity.
- ◆Fast switching time.
- ◆Very small size making it easy to provide high-density, small-sized hybrid ICs.
- ◆Complement to 2SC3647.



Absolute Maximum Rating (Ta=25°C)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	BV_{CBO}	-120	V
Collector-Emitter Voltage	BV_{CEO}	-100	V
Emitter-Base Voltage	BV_{EBO}	-6	V
Collector Current	I_C	-2	A
Collector Current (Pulse)	I_{CP}	-3	A
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~150	°C

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	Value			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	BV_{CBO}	$I_C = -100\mu A, I_E = 0$	-120			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C = -1mA, I_B = 0$	-100			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E = -100\mu A, I_C = 0$	-6			V
Collector cut-off current	I_{CBO}	$V_{CB} = -100V, I_E = 0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4V, I_C = 0$			-100	nA
DC current gain	h_{FE}	$V_{CE} = -5V, I_C = -100mA$	100		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -1A, I_B = -100mA$			-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -1A, I_B = -100mA$			-1.2	V
Transition frequency	f_T	$V_{CE} = -10V, I_B = -100mA$		120		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, F=1MHz$		25		pF

$h_{FE}(2)$ Classification

Classification	R	S	T
Range	100-200	140-280	200-400
Marking	ACR	ACS	ACT

Typical Characteristics

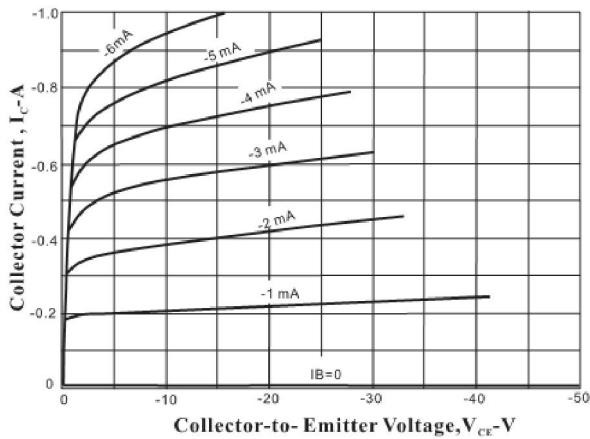


Figure 1. Static Characteristic

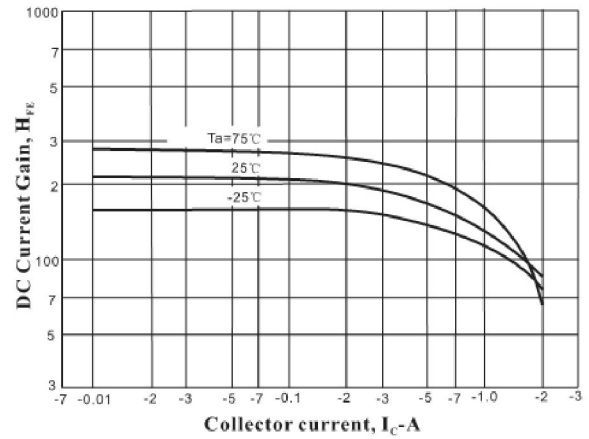


Figure 2. DC current Gain

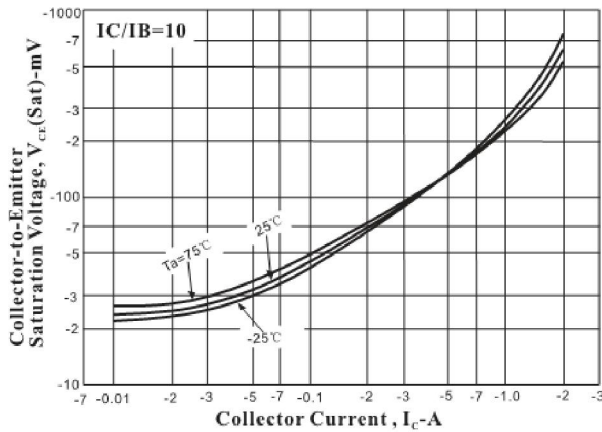


Figure 3. Collector-Emitter Saturation Voltage

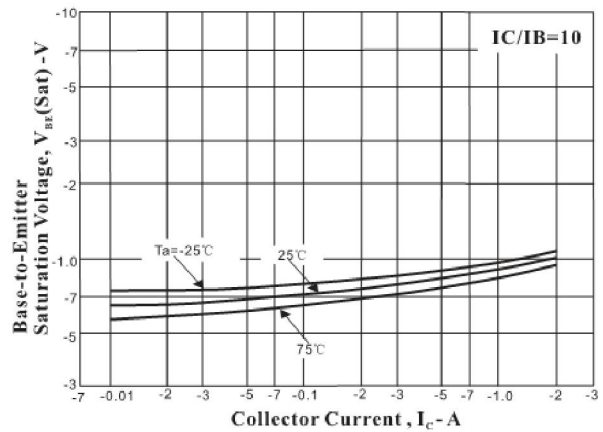


Figure 4. Base-Emitter Saturation Voltage

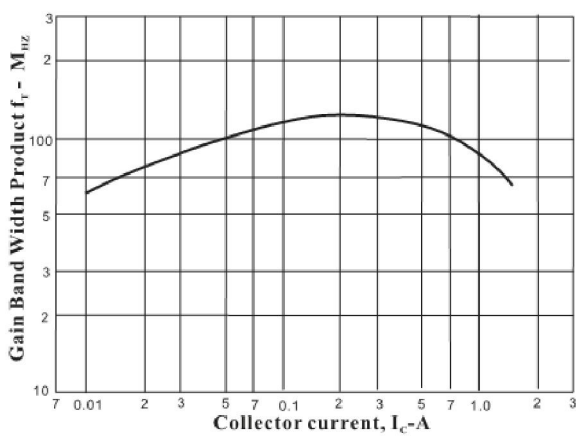


Figure 5. Current Gain Bandwidth Product

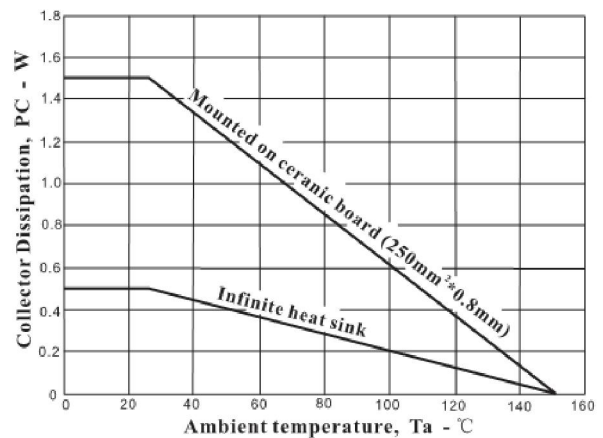


Figure 6. Power Derating

Package Outline

SOT-89

Symbol	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

Summary of Packing Options

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

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 [YFW Electronics manufacturer](#):

Other Similar products are found below :

[BC559C](#) [MCH4017-TL-H](#) [MMBT-2369-TR](#) [BC546/116](#) [NJVMJD148T4G](#) [NTE16](#) [NTE195A](#) [IMX9T110](#) [2N4401-A](#) [2N6728](#) [2SA1419T-TD-H](#) [2SB1204S-TL-E](#) [2SC5488A-TL-H](#) [FMC5AT148](#) [2N2369ADCSM](#) [2N2907A](#) [2N3904-NS](#) [2N5769](#) [2SC4618TLN](#) [CPH6501-TL-E](#) [BC856BW-13-F](#) [US6T6TR](#) [BAX18/A52R](#) [BC556/112](#) [IMZ2AT108](#) [MMST8098T146](#) [MCH6102-TL-E](#) [2N3879](#) [30A02MH-TL-E](#) [NTE13](#) [NTE282](#) [NTE323](#) [NTE350](#) [NTE81](#) [JANTX2N2920L](#) [JANSR2N2907AUB](#) [CMLT3946EG TR](#) [SNSS40600CF8T1G](#) [CMLT3906EG TR](#) [GRP-DATA-JANS2N2907AUB](#) [GRP-DATA-JANS2N2222AUA](#) [MMDT3946FL3-7](#) [2N4240](#) [JANS2N3019](#) [MSB30KH-13](#) [2N2221AUB](#) [2SD1815T-TL-E](#) [2N6678](#) [2N2907Ae4](#) [JAN2N3507](#)