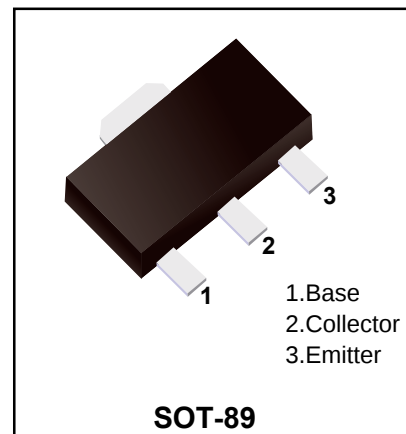


PNP Plastic-Encapsulate Transistors

Features

- ♦ Low collector saturation voltage : $V_{CE(sat)}$
=0.45V(Typ.)
- ♦ Excellent DC current gain characteristics.
- ♦ Complement the YFW1963



Absolute Maximum Rating (Ta=25°C)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	BV_{CBO}	-30	V
Collector-Emitter Voltage	BV_{CEO}	-20	V
Emitter-Base Voltage	BV_{EBO}	-6	V
Collector Current DC	I_C	-3	A
Collector Current Pluse*	I_{CP}	-5	A
Collector Power Dissipation*	P_C	0.5	W
		2	
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~150	°C

* : When mounted on 40×40×0.8mm ceramic substate

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BV_{CBO}	$I_C = -50\mu A, I_E = 0$	-30			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C = -1mA, I_B = 0$	-20			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E = -50\mu A, I_C = 0$	-6			V
Collector cut-off current	I_{CBO}	$V_{CB} = -20V, I_E = 0$			-0.5	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-0.5	μA
DC current gain	h_{FE}	$V_{CE} = -2V, I_B = -0.5A$	82		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 1.5A, I_B = 0.15A$		0.25	0.45	V
Transition frequency	f_T	$V_{CE} = -6V, I_E = -50mA$		120		MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -20V, I_E = 0, f = 1MHz$		60		pF

* Pulse Test: $P_W = 300\mu s$, duty Cycle=2% Pulsed

h_{FE} Classification

Classification	YFW1308-P	YFW1308-Q	YFW1308-R
Range	82~180	120~270	180~390
Marking	BFP	BFQ	BFR

Typical Characteristics

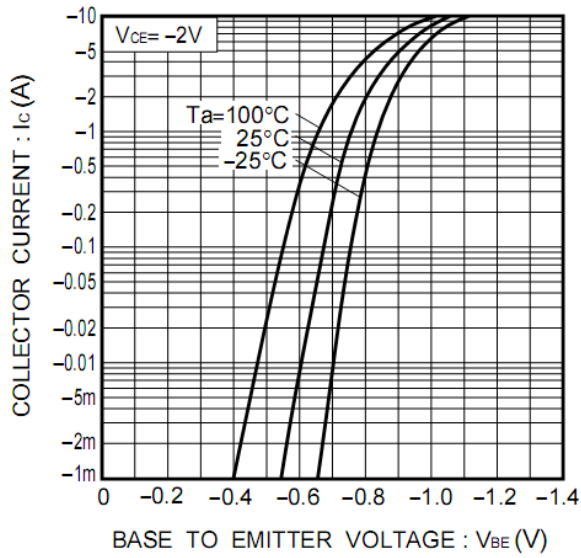


Figure 1. Grounded emitter propagation characteristics

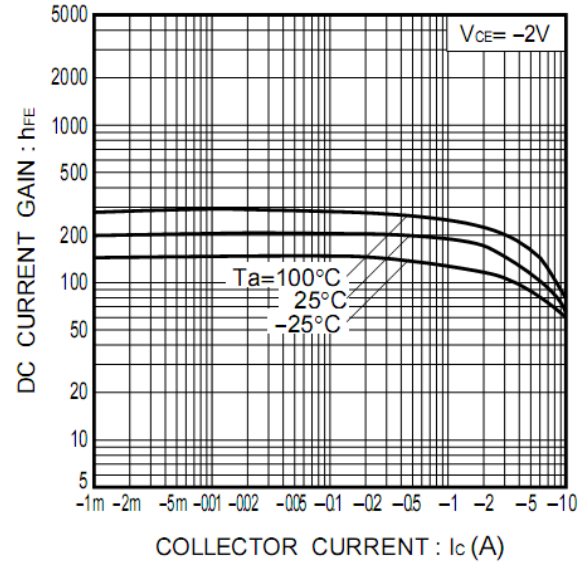


Figure 2. DC current Gain vs collector current

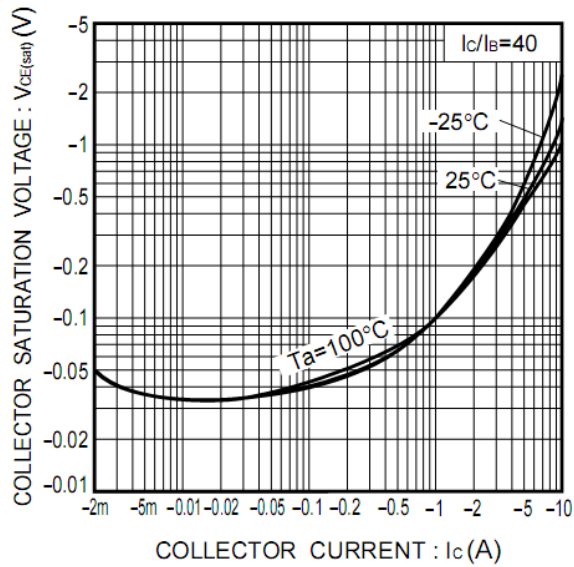


Figure 3. Collector-Emitter Saturation Voltage vs. collector current

Ordering information

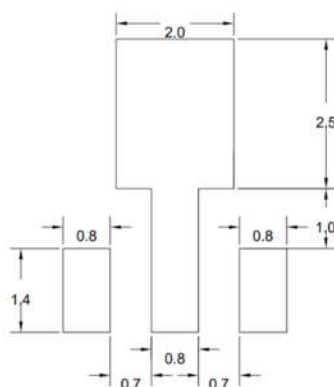
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel, 7" reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

Package Dimensions

SOT-89

Dim	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

The recommended mounting pad size



UNIT:MM

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