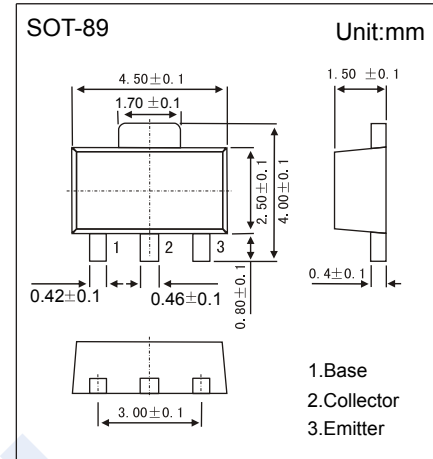


PNP Transistors

2SA1948

■ Features

- Collector Current Capability $I_c = -0.1A$
- Collector Emitter Voltage $V_{CE} = -120V$
- Complementary to 2SC5213



■ Absolute Maximum Ratings $T_a = 25^\circ C$

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	-120	V
Collector - Emitter Voltage	V_{CE0}	-120	
Emitter - Base Voltage	V_{EB0}	-5	
Collector Current - Continuous	I_c	-100	mA
Collector Power Dissipation	P_c	500	mW
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature range	T_{stg}	-55 to 150	

■ Electrical Characteristics $T_a = 25^\circ C$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_c = -100 \mu A, I_E = 0$	-120			V
Collector- emitter breakdown voltage	V_{CE0}	$I_c = -1 mA, R_{BE} = \infty$	-120			
Emitter - base breakdown voltage	V_{EB0}	$I_E = -100 \mu A, I_c = 0$	-5			
Collector-base cut-off current	I_{CB0}	$V_{CB} = -100 V, I_E = 0$			-100	nA
Emitter cut-off current	I_{EB0}	$V_{EB} = -4V, I_c = 0$			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c = -50 mA, I_B = -2.5mA$			-0.6	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_c = -50 mA, I_B = -2.5mA$			-1.2	
DC current gain	h_{FE}	$V_{CE} = -10V, I_c = -10mA$	150		800	
Collector output capacitance	C_{ob}	$V_{CB} = -20V, I_E = 0, f = 1MHz$		3.5		pF
Transition frequency	f_T	$V_{CE} = -10V, I_E = 10mA$		200		MHz

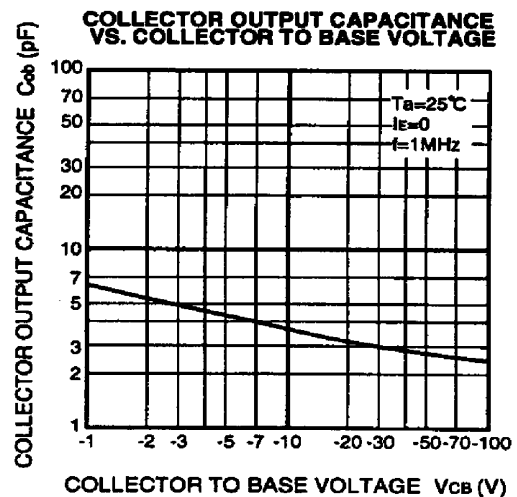
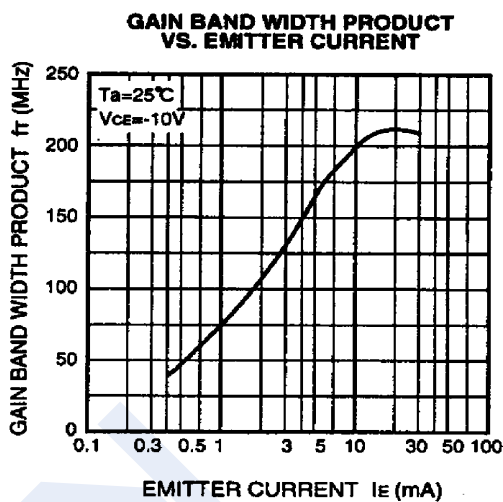
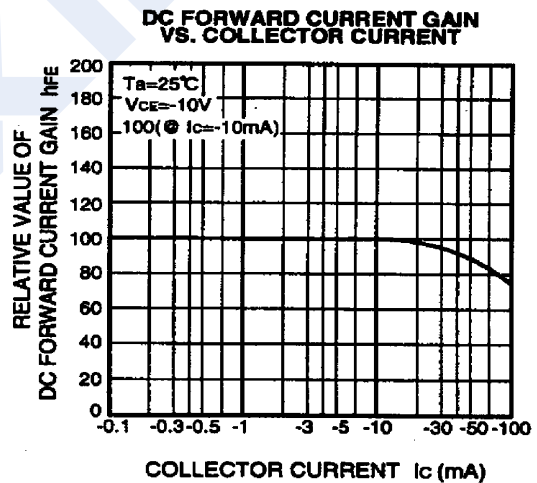
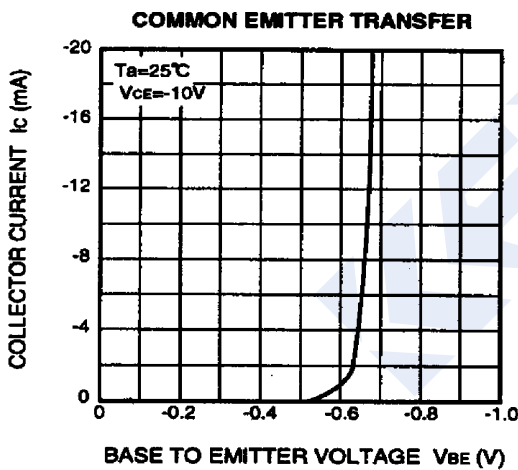
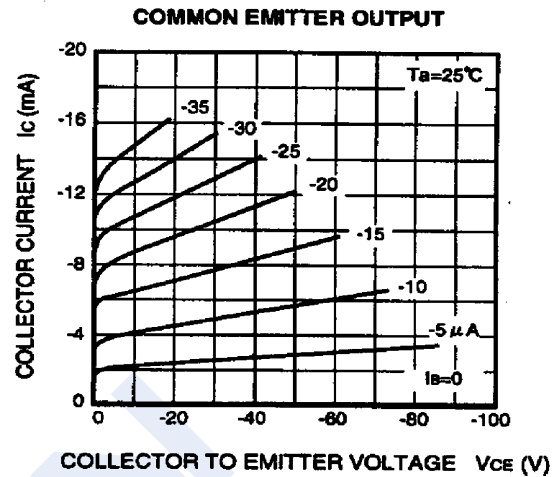
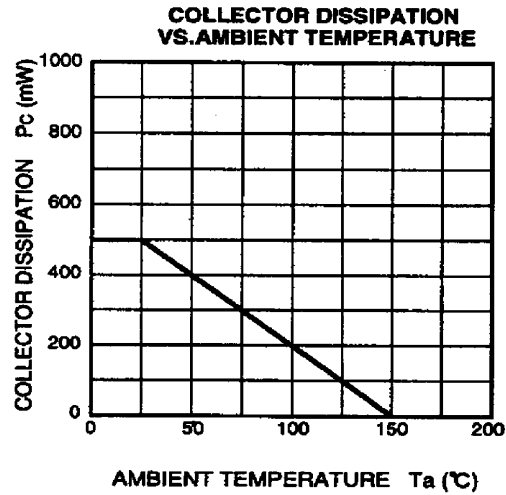
■ Classification of h_{FE}

Type	2SA1948-E	2SA1948-F	2SA1948-G
Range	150-300	250-500	400-800
Marking	AC*E	AC*F	AC*G

PNP Transistors

2SA1948

■ Typical Characteristics



PNP Transistors

2SA1948

■ Typical Characteristics

