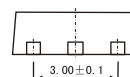
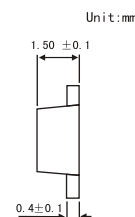
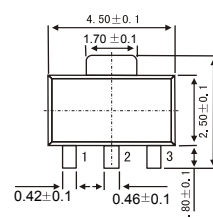


■ Features

- Low Collector Saturation Voltage:
 $V_{CE(sat)} < -0.4V$ ($I_C = -500mA$, $I_B = -50mA$)
- Complement to 2SD1000

SOT-89



- Unit:mm
- 1.Base
 - 2.Collector
 - 3.Emitter

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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-60	V
Collector - Emitter Voltage	V_{CEO}	-50	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-0.7	A
Collector Current - Pulse(Note.1)	I_{CP}	-1	
Collector Power Dissipation	P_C	2	W
Junction Temperature	T_J	150	$^\circ C$
Storage Temperature range	T_{stg}	-55 to 150	

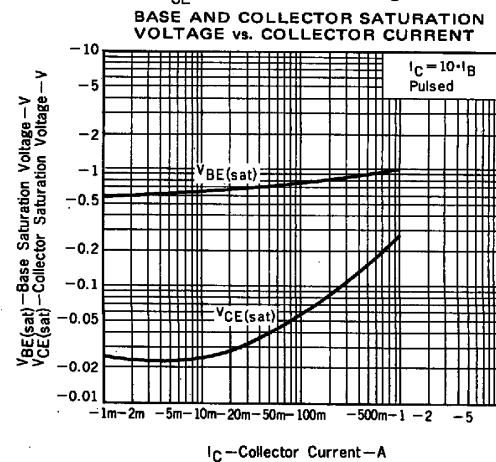
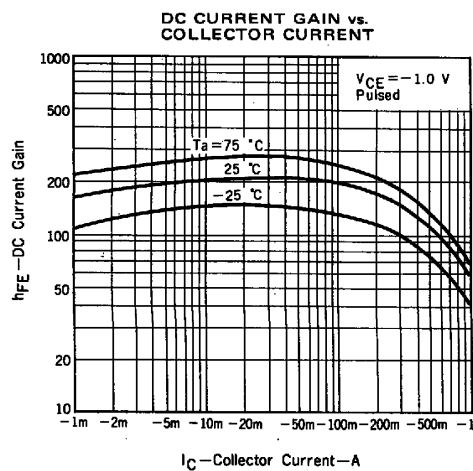
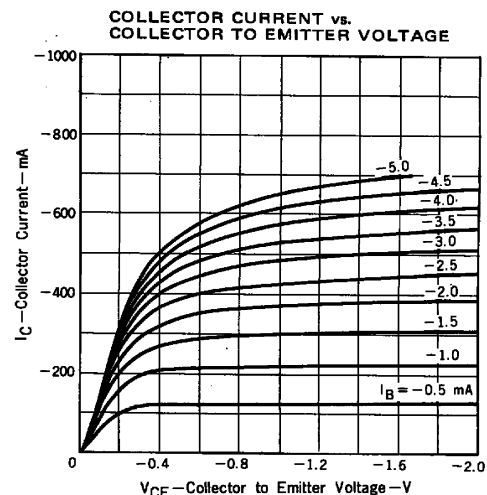
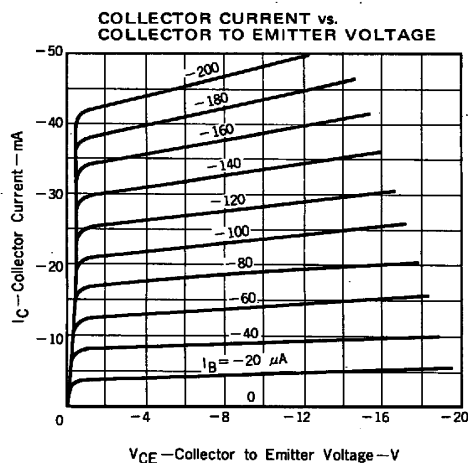
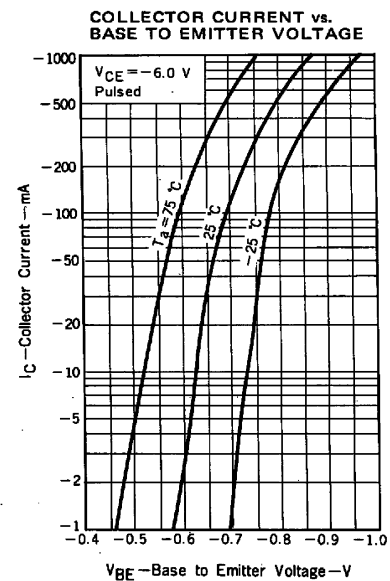
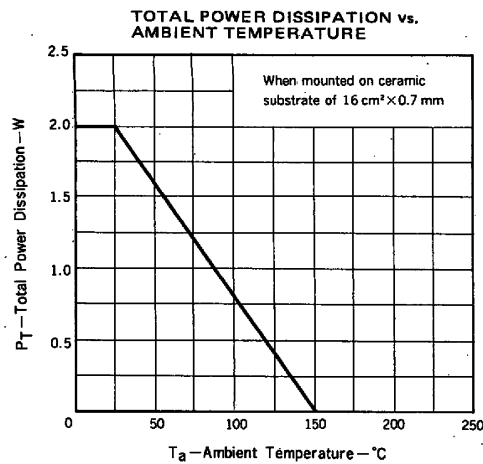
Note.1: $PW \leq 10ms$, Duty Cycle $\leq 50\%$

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = -100 \mu A$, $I_E = 0$	-60			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = -1 mA$, $I_B = 0$	-50			
Emitter - base breakdown voltage	V_{EBO}	$I_E = -100 \mu A$, $I_C = 0$	-5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -60 V$, $I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V$, $I_C = 0$			-0.1	
Collector-emitter saturation voltage (Note.1)	$V_{CE(sat)}$	$I_C = -500mA$, $I_B = -50mA$		-0.16	-0.4	V
Base - emitter saturation voltage (Note.1)	$V_{BE(sat)}$	$I_C = -500mA$, $I_B = -50mA$		-0.9	-1.2	
Base - emitter voltage (Note.1)	V_{BE}	$V_{CE} = -6V$, $I_C = -10mA$	-600	-630	-700	mV
DC current gain (Note.1)	h_{FE}	$V_{CE} = -1V$, $I_C = -100mA$	90	200	400	
		$V_{CE} = -1V$, $I_C = -500mA$	50	120		
Collector output capacitance	C_{ob}	$V_{CB} = -6V$, $I_E = 0 mA$, $f = 1MHz$		25		pF
Transition frequency	f_T	$V_{CE} = -6V$, $I_E = 10mA$		120		MHz

Note.1:Pulse test : Pulse width $\leq 350\mu s$, Duty Cycle $\leq 2\%$.

Typical Characteristics



■ Typical Characteristics

