

SOT-89 Plastic-Encapsulate Transistors

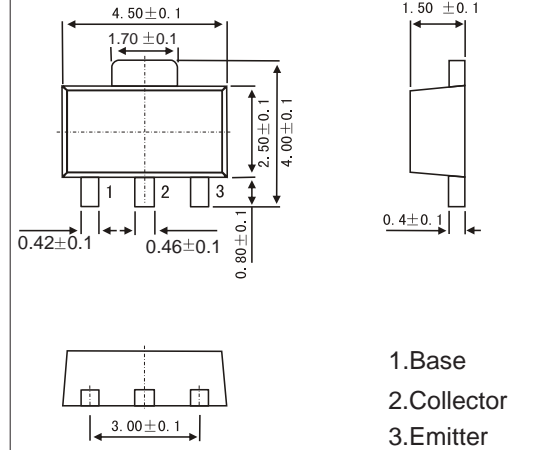
Features

- Low $V_{CE(sat)}$
- Compliments to 2SB1132
- NPN Transistors

MECHANICAL DATA

- Case style: SOT-89 molded plastic
- Mounting position: any

SOT-89



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	32	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current (DC) $P_w=20ms, duty=1/2$	I_c	1 2	A A
Collector Power Dissipation	P_c *	0.5	W
Junction temperature	T_j	150	°C
Storage temperature Range	T_{stg}	-55 to +150	°C

PACKAGE INFORMATION

Device	Package	Shipping
2SD1664	SOT-89	1000/Tape&Reel

* mounted on a 40x40x0.7mm ceramic board.

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_c=50\mu A, I_E=0$	40			V
Collector- emitter breakdown voltage	V_{CEO}	$I_c=1mA, I_B=0$	32			
Emitter - base breakdown voltage	V_{EBO}	$I_E=50\mu A$	5			
Collector-base cut-off current	I_{CBO}	$V_{CB}=20V, I_E=0$			0.5	uA
Emitter cut-off current	I_{EBO}	$V_{EB}=4V, I_C=0$			0.5	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$		0.15	0.4	V
DC current gain	h_{FE}	$V_{CE}=3V, I_C=100mA$	82		390	
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		15		pF
Transition frequency	f_T	$V_{CE}=5V, I_C=-50mA, f=100MHz$		150		MHz

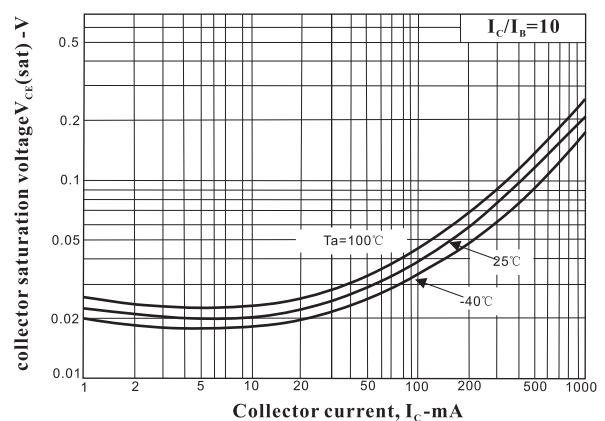
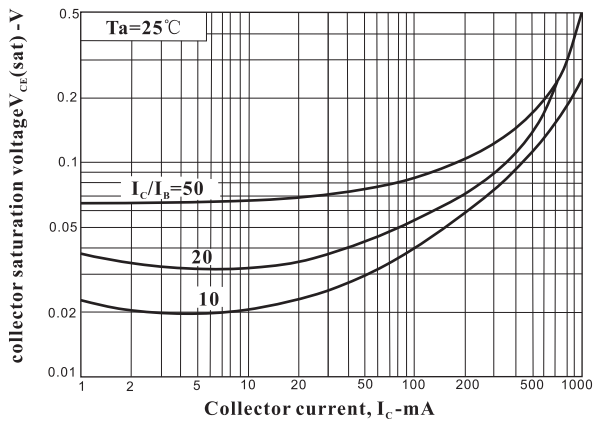
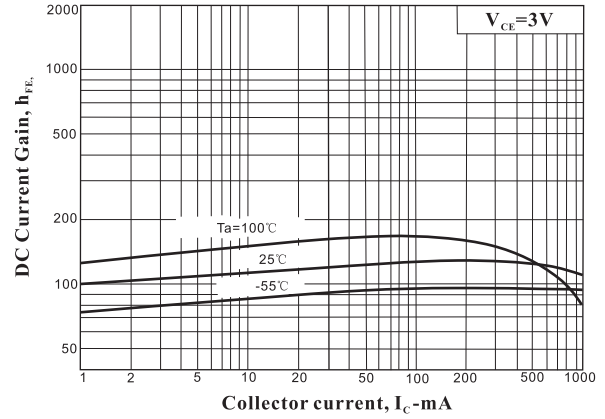
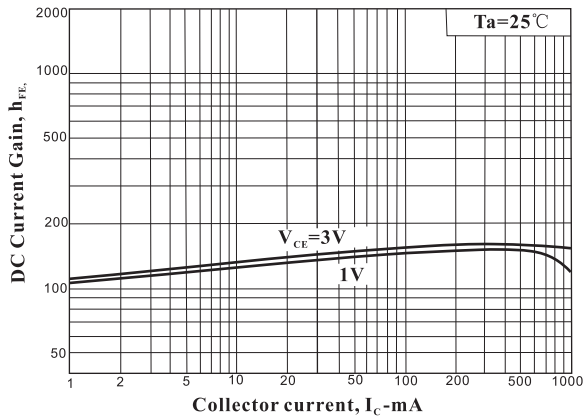
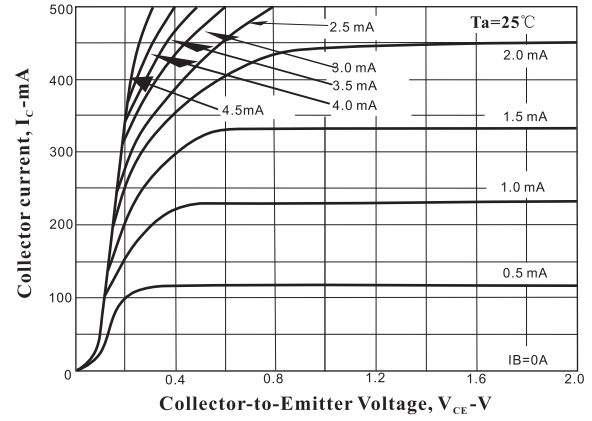
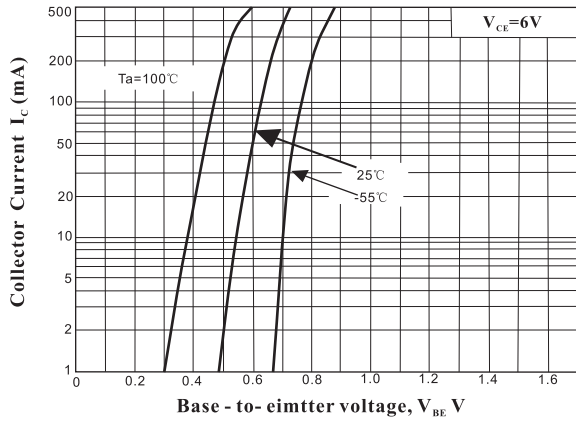
hFE Classification

Type	2SD1664-P	2SD1664-Q	2SD1664-R
Range	82-180	120-270	180-390
Marking	DAP*	DAQ*	DAR*



RATINGS AND CHARACTERISTIC CURVES

Typical Characteristics





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■ Typical Characteristics

