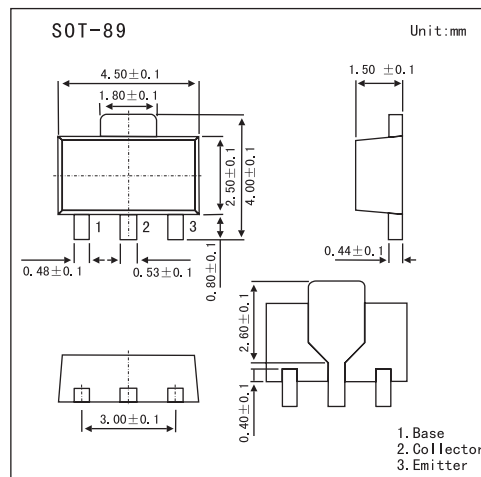


■ Features

- High Transition Frequency:  $f_T = 200\text{MHz}(\text{typ.})$
- Low Collector Output Capacitance:  $C_{ob} = 3.5\text{pF}(\text{typ.})$
- Complementary to 2SC3803



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

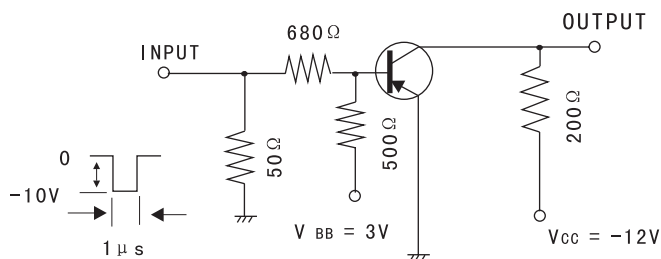
Parameter	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CB0}$	-60	V
Collector-Emitter Voltage	$V_{CE0}$	-45	V
Emitter-Base Voltage	$V_{EB0}$	-5	V
Collector Current	$I_C$	-200	mA
Base Current	$I_B$	-50	mA
Collector Power Dissipation	$P_C$	500	mW
	$P_{C^*}$	1.0	W
Jumction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature Range	$T_{stg}$	-55 to +150	$^\circ\text{C}$

\* Mounted on a ceramic substrate (250 mm<sup>2</sup> x 0.8t)

■ Electrical Characteristics  $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -45\text{V}, I_E = 0$			-0.1	uA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5\text{V}, I_C = 0$			-0.1	uA
DC Current Gain	$h_{FE}$	$V_{CE} = -1\text{V}, I_C = -10\text{mA}$	40		240	
		$V_{CE} = -3\text{V}, I_C = -200\text{mA}$	20			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -100\text{mA}, I_B = -10\text{mA}$			-0.3	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -100\text{mA}, I_B = -10\text{mA}$			-1.0	V
Transition Frequency	$f_T$	$V_{CE} = -10\text{V}, I_C = -10\text{mA}$	100	200		MHz
Input Impedance (real part)	$Re(hie)$	$V_{CB} = -10\text{V}, I_E = 10\text{mA}, f = 200\text{MHz}$			120	$\Omega$
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		3.5	5	pF
Turn-On Time	$t_{on}$	See Test Circuit.		40		ns
Storage Time	$t_{stg}$			250		ns
Fall Time	$t_f$			30		ns

■ Test Circuit



D. C.  $\leq$  2%

■ hFE Classification

Marking	W		
Rank	R	O	Y
hFE	40 ~ 80	70 ~ 140	120 ~ 240

■ Electrical Characteristics Curves

