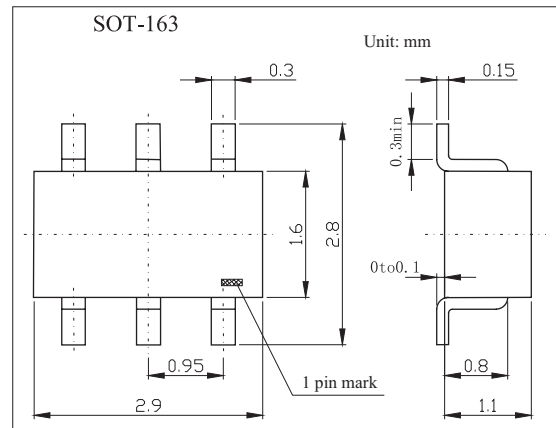
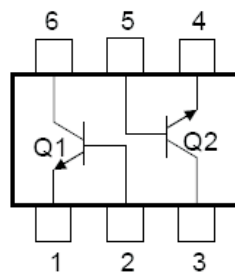


NPN Silicon Epitaxial Transistor

HN1C07F

■ Features

- Excellent Current Gain(h_{FE})linearity
: $h_{FE}=25(\text{min})$ at $V_{CE}=6V, I_C=400\text{mA}$



1 Emitter1 4 Emitter2
2 Base1 5 Base2
3 Collector2 6 Collector1

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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	50	V
Collector-emitter voltage	V_{CE0}	50	V
Emitter-base voltage	V_{EB0}	5	V
Collector current	I_C	500	mA
Base current	I_B	50	mA
power dissipation	P_D	300	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

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

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Collector cutoff current	I_{CB0}	$V_{CB} = 50V, I_E = 0$			0.1	μA
Emitter cutoff current	I_{EB0}	$V_{EB} = 5V, I_C = 0$			0.1	μA
DC current gain *	h_{FE}	$V_{CE} = 1V, I_C = 100\text{mA}$	70		240	
		$V_{CE} = 6V, I_C = 400\text{mA}$	25			
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C = 100\text{mA}, I_B = 10\text{mA}$		0.1	0.25	V
Base emitter voltage *	V_{BE}	$V_{CE} = 1V, I_C = 100\text{mA}$		0.8	1.0	V
Output capacitance	C_{ob}	$V_{CE} = 6V, I_E = 0, f = 1\text{MHz}$		7		pF
Transition frequency	f_T	$V_{CE} = 6V, I_E = 20\text{mA}$		300		MHz

*. $PW \leq 350\mu\text{s}, \text{duty cycle} \leq 2\%$