

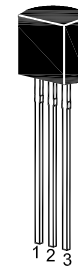
2SD966

NPN Silicon Epitaxial Planar Transistor

for low-frequency power amplification and stroboscope.

The transistor is subdivided into three groups P, Q and R, according to its DC current gain.

On special request, these transistors can be manufactured in different pin configurations.



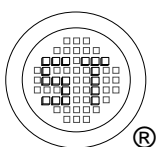
1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	20	V
Emitter to Base Voltage	V_{EBO}	7	V
Collector Current	I_C	5	A
Peak Collector Current	I_{CP}	8	A
Collector Power Dissipation	P_C	1	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $V_{CE} = 2\text{ V}$, $I_C = 0.5\text{ A}$ at $V_{CE} = 2\text{ V}$, $I_C = 2\text{ A}$ Collector Base Cutoff Current at $V_{CB} = 10\text{ V}$ Emitter Base Cutoff Current at $V_{EB} = 7\text{ V}$ Collector Emitter Breakdown Voltage at $I_C = 1\text{ mA}$ Emitter Base Breakdown Voltage at $I_E = 10\text{ }\mu\text{A}$ Collector Emitter Saturation Voltage at $I_C = 3\text{ A}$, $I_B = 0.1\text{ A}$ Transition Frequency at $V_{CB} = 6\text{ V}$, $I_E = -50\text{ mA}$, $f = 200\text{ MHz}$ Collector Output Capacitance at $V_{CB} = 20\text{ V}$, $f = 1.0\text{ MHz}$	Current Gain Group P Q R	h_{FE}	120	-	250	-
		h_{FE}	230	-	380	-
		h_{FE}	340	-	600	-
		h_{FE}	150	-	-	-
	I_{CBO}	-	-	0.1	μA	
	I_{EBO}	-	-	0.1	μA	
	V_{CEO}	20	-	-	V	
	V_{EBO}	7	-	-	V	
	$V_{CE(sat)}$	-	-	1	V	
	f_T	-	150	-	MHz	
	C_{ob}	-	-	50	pF	



SEMTECH ELECTRONICS LTD.



ISO 9001 : 2008
Certificate No. 16073008



ISO 14001 : 2004
Certificate No. 7116



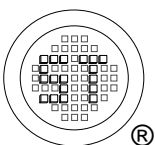
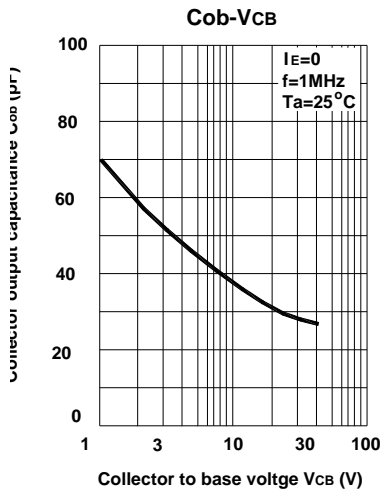
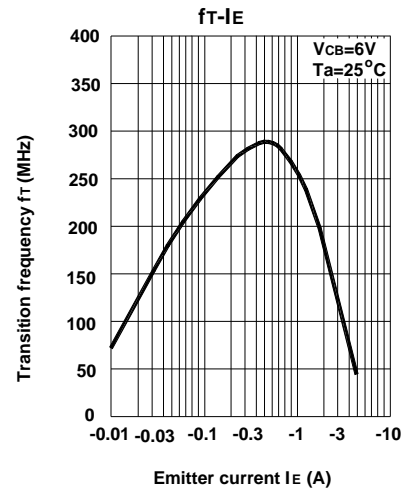
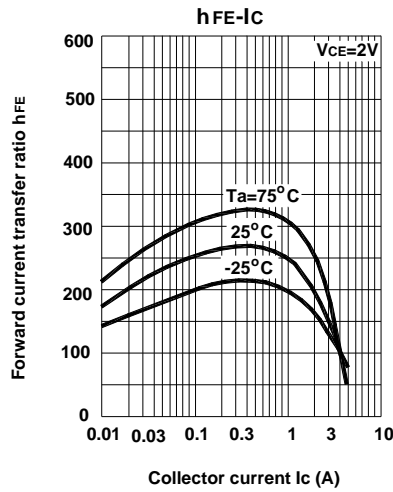
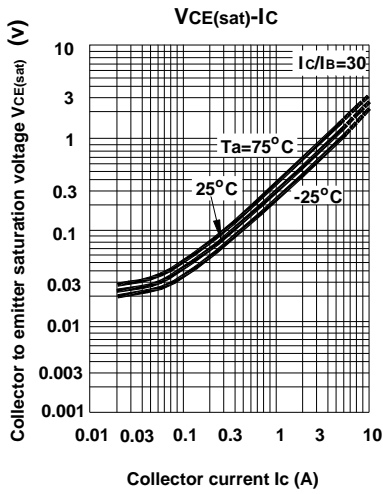
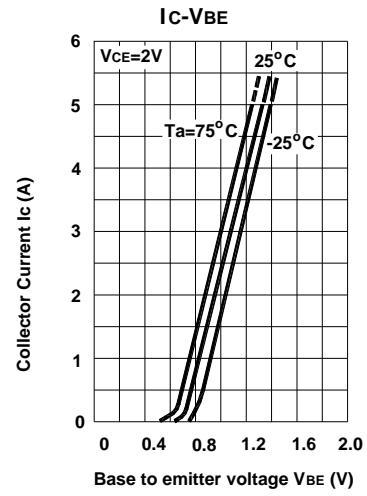
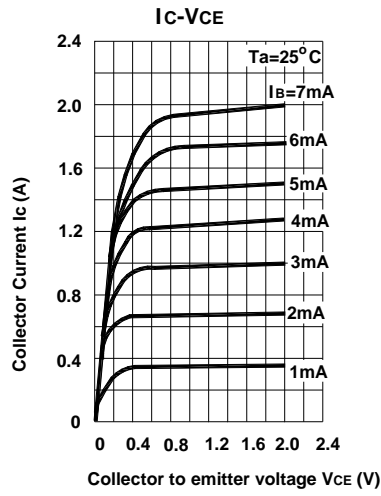
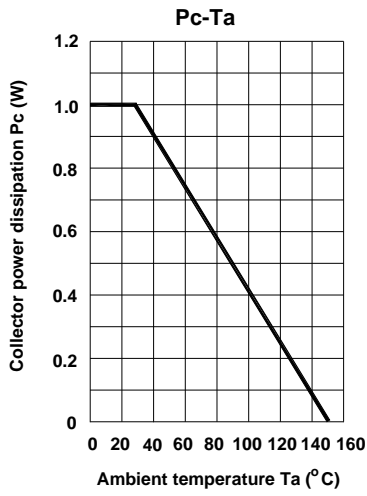
ISO 9001 : 2008
Certificate No. 9079410



BS-ENAS 18001 : 2007
Certificate No. 7116



IECQ QC 080000
Certificate No. PFC/SPM/4654



SEMTECH ELECTRONICS LTD.



ISO 9001:2008 Certificate No. 18073008
 ISO 14001:2004 Certificate No. 7116
 ISO 9001:2008 Certificate No. 9079410
 BS-ONSAS 18001:2007 Certificate No. 7116
 IECQ QC 080000 Certificate No. P10/12P14/1654