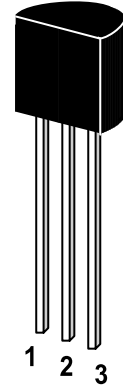


ST 2SD966

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.

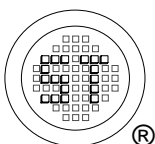


1. Emitter 2. Collector 3. Base

TO-92 Plastic Package
Weight approx. 0.19g

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

	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
Peak Collector Current	I_{CP}	8	A
Collector Current	I_{C}	5	A
Collector Power Dissipation	P_{C}	1	W
Junction Temperature	T_{j}	150	$^\circ\text{C}$
Storage Temperature Range	T_{s}	-55 to +150	$^\circ\text{C}$



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



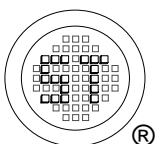
ISO 9001:2000
Certificate No. 0506098

Dated : 07/12/2002

ST 2SD966

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

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



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



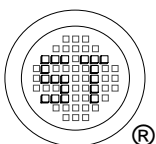
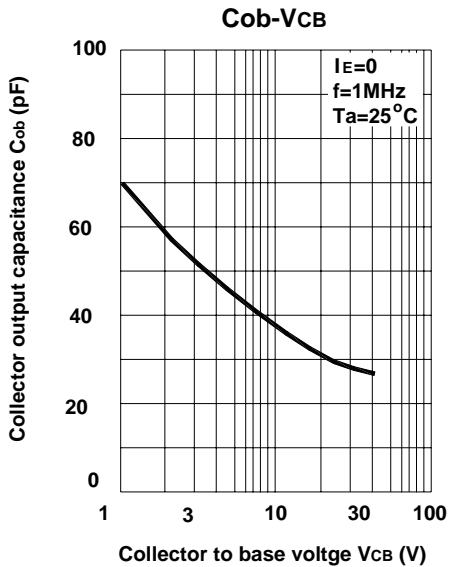
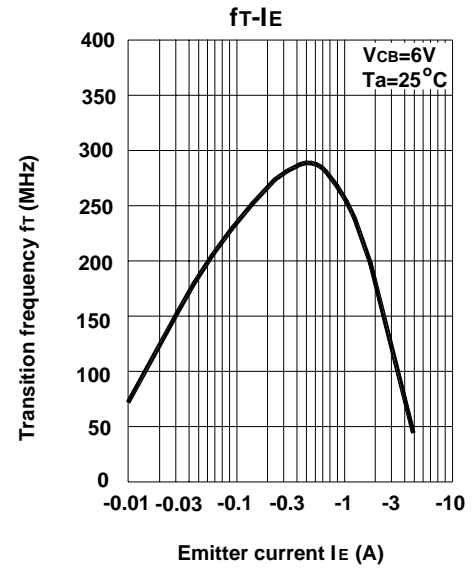
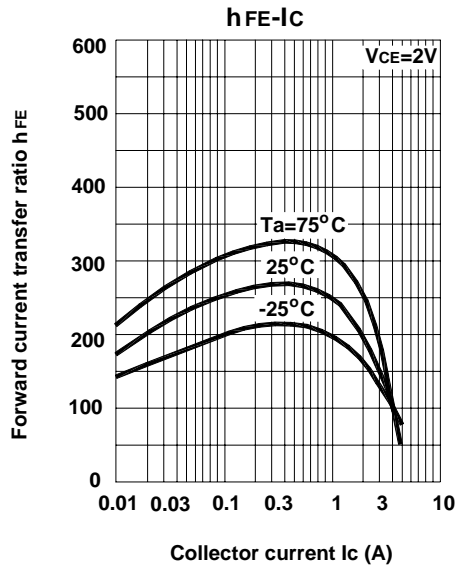
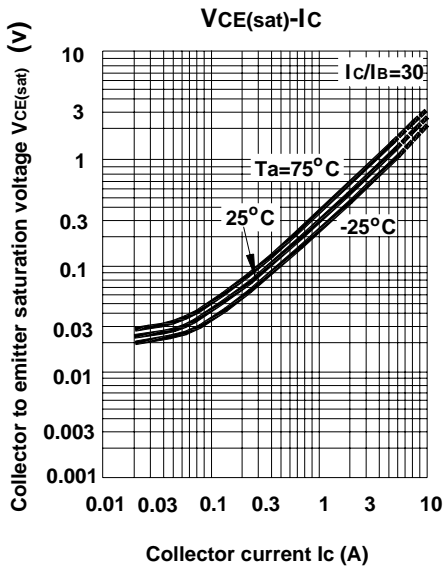
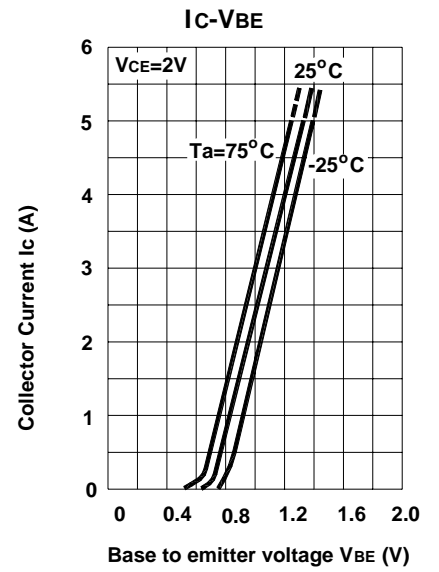
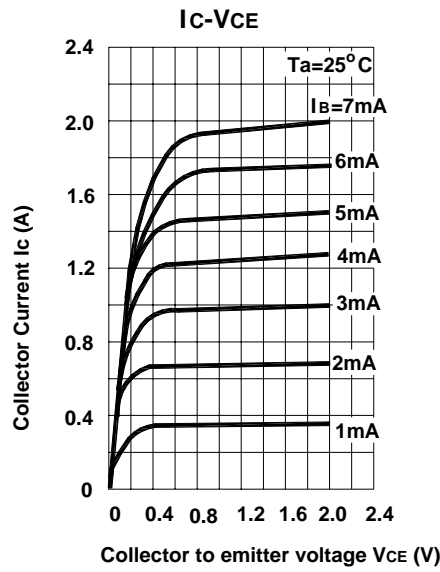
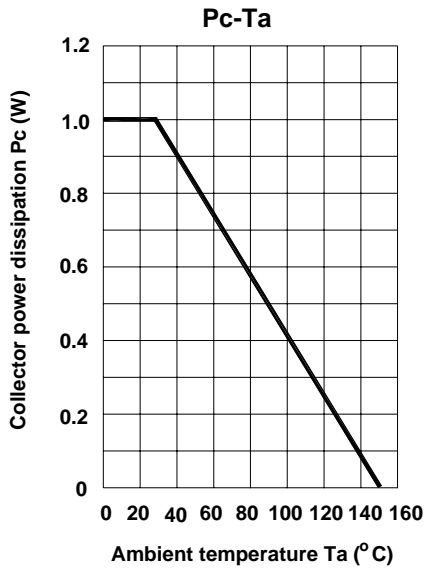
ISO 14001:2004
Certificate No. 71116



ISO 9001:2000
Certificate No. 0506098

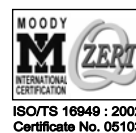
Dated : 07/12/2002

ST 2SD966



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 71116



ISO 9001:2000
Certificate No. 0506098

Dated : 07/12/2002