Elektronische Bauelemente

2SC1740S

0.15A , 60V

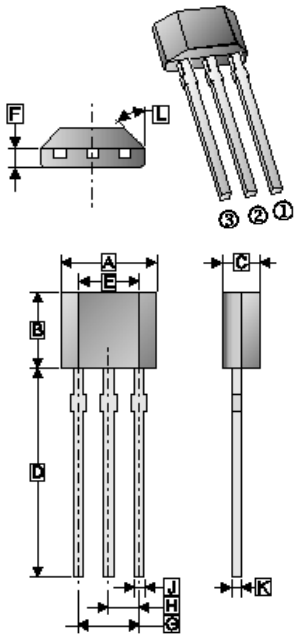
NPN Plastic-Encapsulated Transistor

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

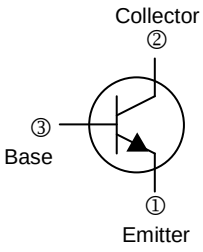
FEATURES

- Low C_{ob}

TO-92S



REF.	Millimeter	
	Min.	Max.
A	3.90	4.10
B	3.05	3.25
C	1.42	1.62
D	15.1	15.5
E	2.97	3.27
F	0.66	0.86
G	2.44	2.64
H	1.27 REF.	
J	0.36	0.48
K	0.36	0.51
L	45°	



CLASSIFICATION OF h_{FE}

Product-Rank	2SC1740S-Q	2SC1740S-R	2SC1740S-S
Range	120~270	180~390	270~560

ABSOLUTE MAXIMUM RATINGS (T_A=25℃ unless otherwise specified)

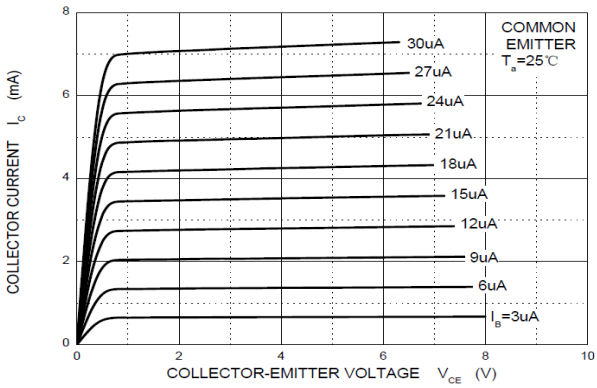
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	7	V
Collector Current - Continuous	I_C	150	mA
Collector Power Dissipation	P_C	300	mW
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	℃

ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise specified)

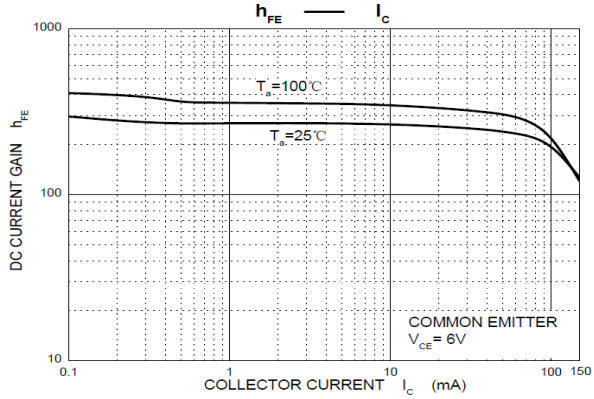
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	60	-	-	V	I_C=50μA, I_E=0
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	50	-	-	V	I_C=1mA, I_B=0
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	7	-	-	V	I_E=50μA, I_C=0
Collector Cut–Off Current	I_{CBO}	-	-	0.1	μA	V_{CB}=60V, I_E=0
Emitter Cut–Off Current	I_{EBO}	-	-	0.1	μA	V_{EB}=7V, I_C=0
DC Current Gain	h_{FE}	120	-	560		V_{CE}=6V, I_C=1mA
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.4	V	I_C=50mA, I_B=5mA
Collector Output Capacitance	C_{ob}	-	2	3.5	pF	V_{CB}=12V, I_E=0, f=1MHz
Transition Frequency	f_T	100	-	-	MHz	V_{CE}=12V, I_C= -2mA, f=100MHz

CHARACTERISTIC CURVES

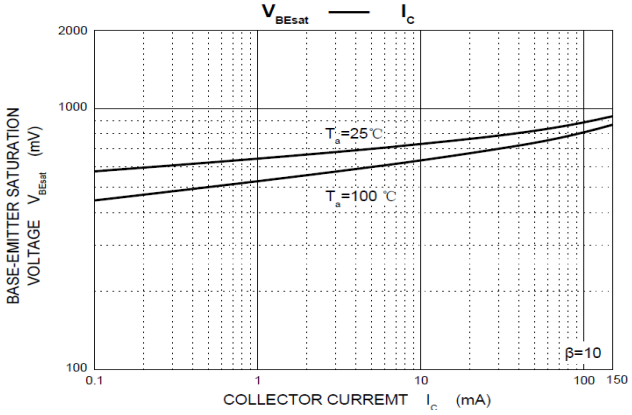
Static Characteristic



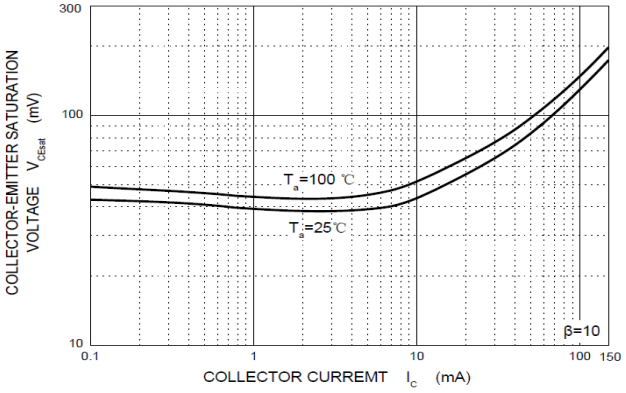
h_{FE} —— I_C



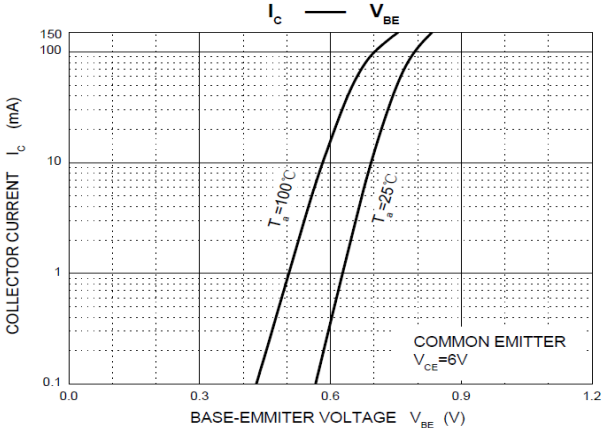
V_{BEsat} —— I_C



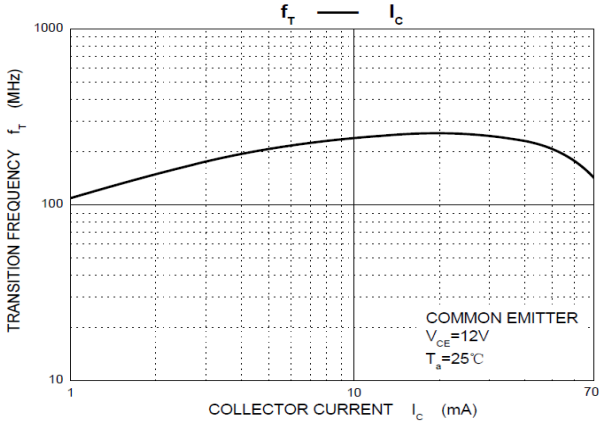
V_{CEsat} —— I_C



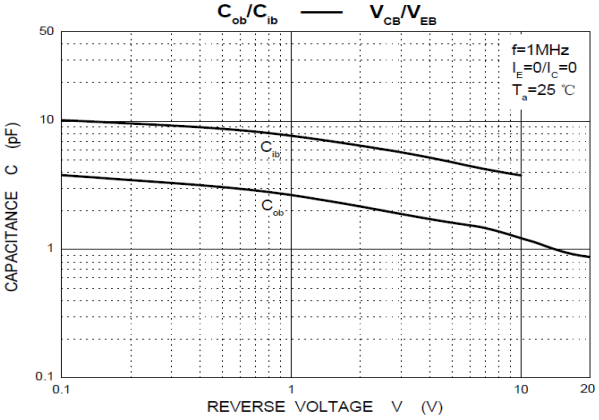
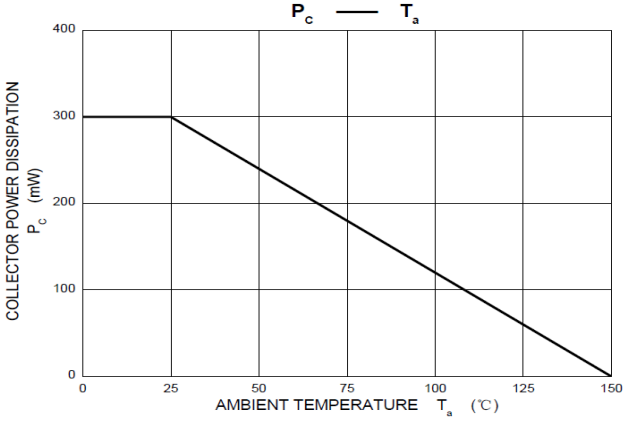
I_C —— V_{BE}



f_T —— I_C



C_{ob}/C_{ib} —— V_{CB}/V_{EB}



P_C —— T_a