

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

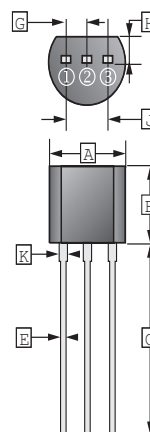
FEATURES

- Low speed switching.

CLASSIFICATION OF h_{FE}

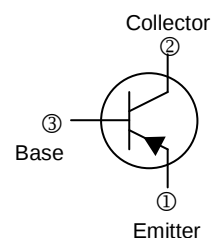
Product-Rank	B772S-R	B772S-O	B772S-Y	B772S-GR
Range	60~120	100~200	160~320	200~400

TO-92



① Emitter
② Collector
③ Base

REF.	Millimeter	
	Min.	Max.
A	4.40	4.70
B	4.30	4.70
C	12.70	-
D	3.30	3.81
E	0.36	0.56
F	0.36	0.51
G	1.27 TYP.	
H	1.10	-
J	2.42	2.66
K	0.36	0.76



ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

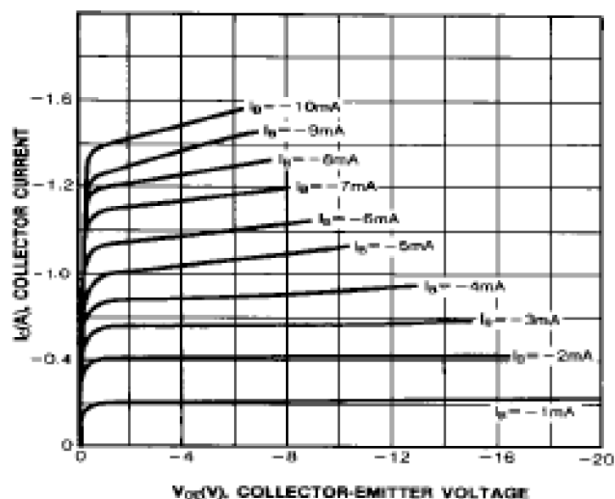
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-40	V
Collector to Emitter Voltage	V_{CEO}	-30	V
Emitter to Base Voltage	V_{EBO}	-6	V
Collector Current - Continuous	I_C	-3	A
Collector Power Dissipation	P_C	625	mW
Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	200	$^\circ\text{C} / \text{W}$
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

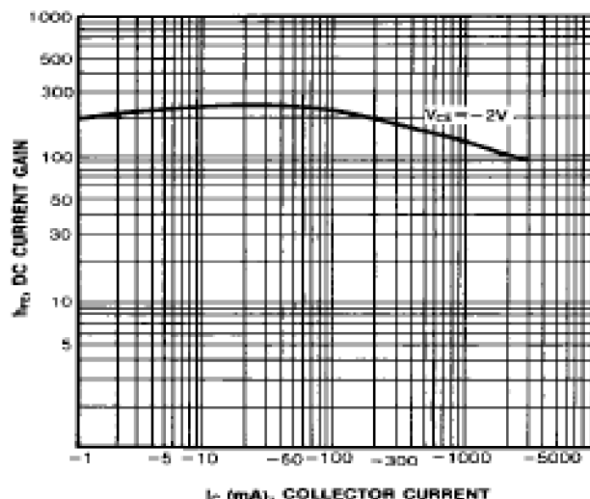
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	-40	-	-	V	$I_C = -100\mu\text{A}, I_E = 0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	-30	-	-	V	$I_C = -10\text{mA}, I_B = 0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	-6	-	-	V	$I_E = -100\mu\text{A}, I_C = 0$
Collector Cut-Off Current	I_{CBO}	-	-	-1	μA	$V_{CB} = -40\text{V}, I_E = 0$
Collector Cut-Off Current	I_{CEO}	-	-	-10	μA	$V_{CE} = -30\text{V}, I_B = 0$
Emitter Cut-Off Current	I_{EBO}	-	-	-1	μA	$V_{EB} = -6\text{V}, I_C = 0$
DC Current Gain	h_{FE}	60	-	400	-	$V_{CE} = -2\text{V}, I_C = -1\text{A}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	-0.5	V	$I_C = -2\text{A}, I_B = -200\text{mA}$
Base to Emitter Voltage	$V_{BE(sat)}$	-	-	-1.5	V	$V_{CE} = -2\text{V}, I_C = -200\text{mA}$
Transition Frequency	f_T	50	80	-	MHz	$V_{CE} = -5\text{V}, I_C = -100\text{mA}, f = 10\text{MHz}$

CHARACTERISTIC CURVES

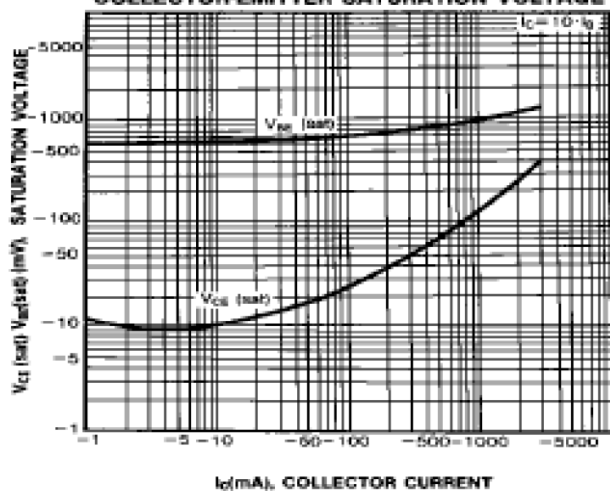
STATIC CHARACTERISTIC



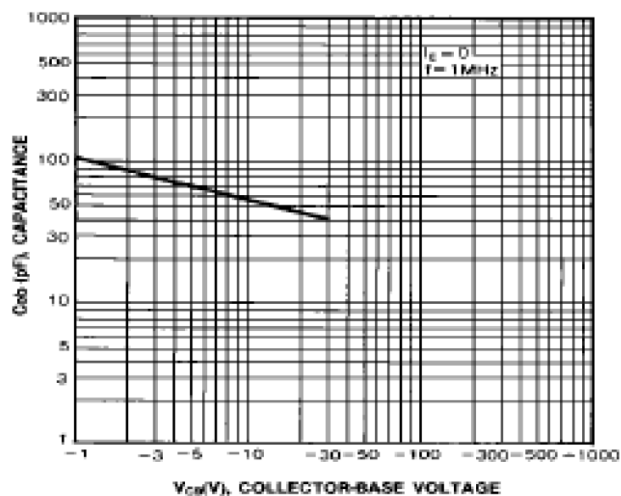
DC CURRENT GAIN



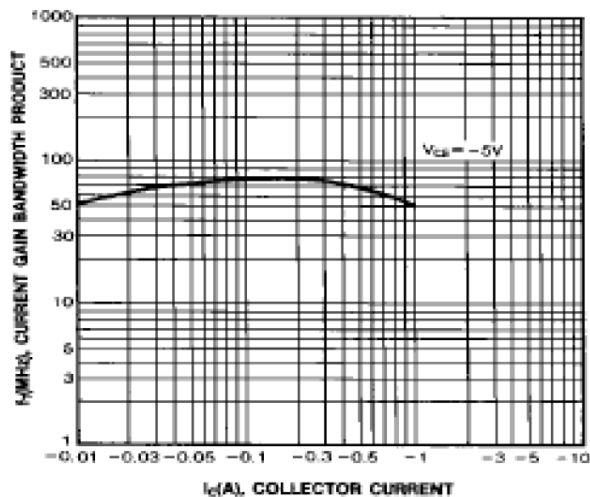
BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE



COLLECTOR OUTPUT CAPACITANCE



CURRENT GAIN-BANDWIDTH PRODUCT



SAFE OPERATING AREA

