



2SC2712 TRANSISTOR (NPN)

- **Low Noise: NF=1 dB (Typ),10dB(MAX)**
- **Complementary to 2SA1162**

A diagram of a three-pin DIN connector. The connector is shown from a perspective view. It has three pins extending from the front. The pins are labeled with numbers: '1' for the leftmost pin, '2' for the middle pin, and '3' for the rightmost pin. The connector body is black with a silver-colored metal housing around the pins.

Symbol	Parameter	Value	Units
V_{CB0}	Collector-Base Voltage	60	V
V_{CE0}	Collector-Emitter Voltage	50	V
V_{EB0}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	150	mA
P_C	Collector Power Dissipation	150	mW
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55-150	°C

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1mA, I_B = 0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu A, I_C = 0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB} = 60V, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5V, I_C = 0$			0.1	μA
DC current gain	h_{FE}	$V_{CE} = 6V, I_C = 2mA$	70		700	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100mA, I_B = 10mA$		0.1	0.25	V
Transition frequency	f_T	$V_{CE} = 10V, I_C = 1mA$	80			MHz
Output capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$		2.0	3.5	pF
Noise Figure	NF	$V_{CE} = 6V, I_C = 0.1mA, f = 1kHz, R_g = 10k\Omega$		1.0	10	dB

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	350-700

Typical Characteristics

2SC2712



