

**FEATURES**

Low Noise: NF=1 dB (Typ),10dB(MAX)

Complementary to 2SA1162

**2SC2712 (NPN)**

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	$V_{CBO}$	60	V
Collector-Emitter Voltage	$V_{CEO}$	50	V
Emitter-Base Voltage	$V_{EBO}$	5	V
Collector Current -Continuous	$I_C$	150	mA
Collector Power Dissipation	$P_C$	150	mW
Junction Temperature	$T_J$	125	°C
Storage Temperature	$T_{stg}$	-55 to +150	°C



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	VCBO	$I_C=100\mu A, I_E=0$	60			V
Collector-emitter breakdown voltage	VCEO	$I_C=1mA, I_B=0$	50			V
Emitter-base breakdown voltage	VEBO	$I_E=100\mu A, I_C=0$	5			V
Collector cut-off current	ICB	$V_{CB}=60V, I_E=0$			0.1	$\mu A$
Emitter cut-off current	IEB	$V_{EB}=5V, I_C=0$			0.1	$\mu A$
DC current gain	hFE	$V_{CE}=6V, I_C=2mA$	70		700	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$		0.1	0.25	V
Transition frequency	fT	$V_{CE}=10V, I_C=1mA$	80			MHz
Output capacitance	Cob	$V_{CB}=10V, I_E=0, f=1MHz$		2.0	3.5	pF
Noise Figure	NF	$V_{CE}=6V, I_C=0.1mA, f=1kHz$		1.0	10	dB

 CLASSIFICATION OF  $h_{FE}$ 

Marking	LO	LY	LG	LL
Range	70-140	120-240	200-400	350-700

2SC2712 Typical Characteristics

