

"High voltage and high current: $V_{CEO} = 50\text{ V}$, $I_C = 150$
(max)

"Excellent hFE linearity: $h_{FE} (I_C = 0.1\text{ mA})/ h_{FE} (I_C = 2$
mA)= 0.95 (typ.)

"High hFE: $h_{FE} = 70 \sim 700$

"Low noise: $NF = 1\text{dB}(\text{typ.}), 10\text{dB}(\text{max})$

" 1 3 1 7 U D Q V L V W R U V

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	60	V
Collector-emitter voltage	V_{CEO}	50	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	150	mA
Base current	I_B	30	mA
Collector power dissipation	P_C	150	mW
Junction temperature	T_j	125	°C
Storage temperature range	T_{stg}	-55 to +125	°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = 100\text{ A}$, $I_E = 0$	60			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = 1\text{ mA}$, $I_B = 0$	50			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 100\text{ A}$, $I_C = 0$	5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 60\text{ V}$, $I_E = 0$			100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\text{ V}$, $I_C = 0$			100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100\text{ mA}$, $I_B = 10\text{ mA}$			0.25	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 100\text{ mA}$, $I_B = 10\text{ mA}$			1.2	
DC current gain	hFE	$V_{CE} = 6\text{ V}$, $I_C = 2\text{ mA}$	70		700	
Noise figure	NF	$V_{CE} = 6\text{ V}$, $I_C = 0.1\text{ mA}$, $f = 1\text{ KHz}$, $R_G = 10\text{ K}$		1	10	dB
Collector output capacitance	C_{ob}	$V_{CB} = 10\text{ V}$, $I_E = 0$, $f = 1\text{ MHz}$		2	3.5	pF
Transition frequency	ft	$V_{CE} = 10\text{ V}$, $I_C = 1\text{ mA}$	80			MHz

■ hFE Classification

Type	2SC2712-O	2SC2712-Y	2SC2712-G	2SC2712-L
Range	70-140	120-240	200-400	350-700
Marking	LO	LY	LG	LL

■