

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

FEATURES

- Low Noise: NF=1 dB(Typ.), 10 dB(Max.)
- Complements of the 2SC2712

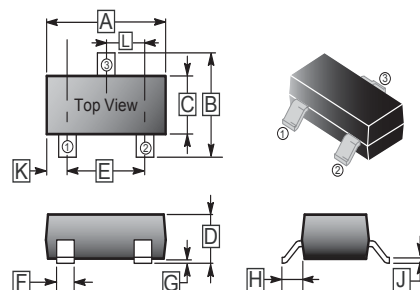
MECHANICAL DATA

- Case: SOT-23, Molded Plastic
- Weight: 0.008 grams(approx.)

CLASSIFICATION OF h_{FE}

Product-Rank	2SA1162-O	2SA1162-Y	2SA1162-GR
Range	70~140	120~240	200~400
Marking	SO	SY	SG

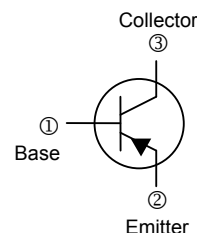
SOT-23



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.80	3.04	G	0.09	0.18
B	2.10	2.55	H	0.45	0.60
C	1.20	1.40	J	0.08	0.177
D	0.89	1.15	K	0.6 REF.	
E	1.78	2.04	L	0.89	1.02
F	0.30	0.50			

PACKAGE INFORMATION

Package	MPQ	LeaderSize
SOT-23	3K	7" inch



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

Parameter	Symbol	Ratings	Unit
Collector to Base Voltage	V_{CB0}	-50	V
Collector to Emitter Voltage	V_{CEO}	-50	V
Emitter to Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-150	mA
Total Device Dissipation	P_D	150	mW
Junction & Storage Temperature	T_J, T_{STG}	125, -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-base breakdown voltage	$V_{(BR)CB0}$	-50	-	-	V	$I_C = -100 \mu\text{A}, I_E = 0$
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	-50	-	-	V	$I_C = -1\text{mA}, I_B = 0$
Emitter-base breakdown voltage	$V_{(BR)EBO}$	-5	-	-	V	$I_E = -100 \mu\text{A}, I_C = 0$
Collector cut-off current	I_{CB0}	-	-	-0.1	μA	$V_{CB} = -50\text{V}, I_E = 0$
Emitter cut-off current	I_{EBO}	-	-	-0.1	μA	$V_{EB} = -5\text{V}, I_C = 0$
Collector-emitter saturation voltage	$V_{CE(sat)}$	-	-	-0.3	V	$I_C = -100\text{mA}, I_B = -10\text{mA}$
DC current gain	h_{FE}	70	-	400		$V_{CE} = -6\text{V}, I_C = -2\text{mA}$
Transition frequency	f_T	80	-	-	MHz	$V_{CE} = -10\text{V}, I_C = -1\text{mA}$
Collector output capacitance	C_{ob}	-	-	7	pF	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$
Noise Figure	NF	-	-	10	dB	$V_{CB} = -6\text{V}, I_C = 0.1\text{mA}, f = 1\text{MHz}, R_g = 10\text{K}\Omega$

CHARACTERISTIC CURVES

