

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

FEATURES

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

CLASSIFICATION OF h_{FE}

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

PACKAGE INFORMATION

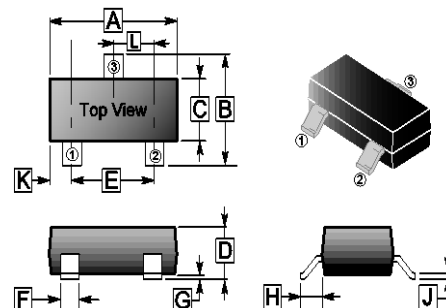
Package	MPQ	Leader Size
SOT-23	3K	7 inch

ORDER INFORMATION

Part Number	Type
2SA1162-□-C	Lead (Pb)-free and Halogen-free

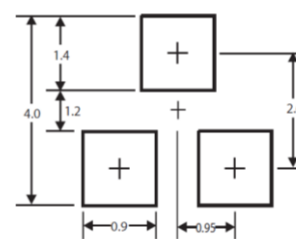
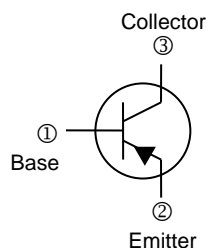
*□= h_{FE} Mark

SOT-23



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.65	3.10	G	0	0.18
B	2.10	3.00	H	0.55	REF.
C	1.10	1.80	J	0.08	0.26
D	0.89	1.40	K	0.60	REF.
E	1.70	2.30	L	0.95	TYP.
F	0.28	0.55			

Mounting Pad Layout



*Dimensions in millimeters

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

Parameter	Symbol	Ratings	Unit
Collector-Base Voltage	V_{CBO}	-50	V
Collector-Emitter Voltage	V_{CEO}	-50	V
Emitter-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	$V_{(BR)CBO}$	-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_{CBO}	-	-	-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

