



Micro Commercial Components

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**2SA1162**  
**2SA1162-O**  
**2SA1162-Y**  
**2SA1162-GR**

**Features**

- Capable of 0.15Watts of Power Dissipation.
- Collector-current: 0.15A
- Collector-base Voltage: -50V
- Operating and storage junction temperature range: -55°C to +150°C
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0

**PNP Silicon**  
**Plastic-Encapsulate**  
**Transistor**

**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Symbol	Parameter	Min	Max	Units
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**OFF CHARACTERISTICS**

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ( $I_C=-1mA$ , $I_B=0$ )	-50	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=-100\mu A$ , $I_E=0$ )	-50	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ( $I_E=-100\mu A$ , $I_C=0$ )	-5	---	Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=-50V$ , $I_E=0$ )	---	-0.1	$\mu A$
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=-5.0V$ , $I_C=0$ )	---	-0.1	$\mu A$

**ON CHARACTERISTICS**

$h_{FE}$	DC Current Gain ( $I_C=-2.0mA$ , $V_{CE}=-6.0V$ )	70	400	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=-100mA$ , $I_B=-10mA$ )	---	-0.3	Vdc

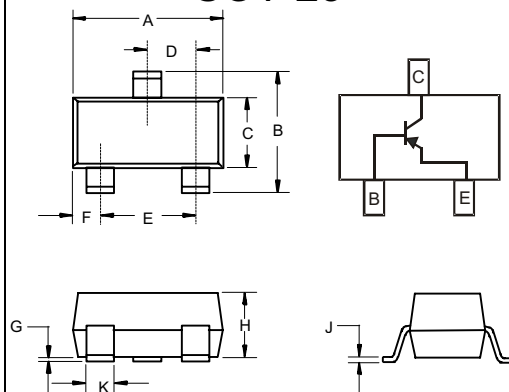
**SMALL-SIGNAL CHARACTERISTICS**

$f_T$	Transistor Frequency ( $I_C=-1.0mA$ , $V_{CE}=-10V$ )	80	---	MHz
$C_{ob}$	Collector Output Capacitance ( $V_{CB}=-10V$ , $I_E=0$ , $f=1MHz$ )	---	7	pF
NF	Noise Figure ( $V_{CE}=-6V$ , $I_C=0.1mA$ , $f=1KHz$ , $R_g=10K\Omega$ )	---	10	dB

**CLASSIFICATION OF  $h_{FE}$**

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

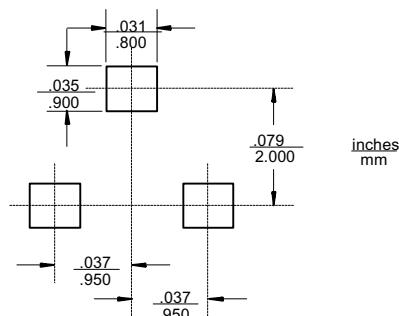
**SOT-23**



**DIMENSIONS**

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.098	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

**Suggested Solder Pad Layout**





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