

TO-126C Plastic-Encapsulate Transistors

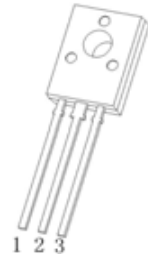
2SC1162 TRANSISTOR (NPN)

FEATURES

- For Low Frequency Power Amplifier Applications

TO – 126C

1. EMITTER
2. COLLECTOR
3. BASE



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

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	35	V
V _{CEO}	Collector-Emitter Voltage	35	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current	2.5	A
P _C	Collector Power Dissipation	1	W
R _{θJA}	Thermal Resistance From Junction To Ambient	125	°C/W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =1mA, I _E =0	35			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =10mA, I _B =0	35			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =1mA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =35V, I _E =0			20	μA
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0			20	μA
DC current gain	h _{FE(1)}	V _{CE} =2V, I _C =0.5A	60		320	
	h _{FE(2)} *	V _{CE} =2V, I _C =1.5A	20			
Collector-emitter saturation voltage	V _{CE(sat)} *	I _C =2A, I _B =200mA			1	V
Base-emitter voltage	V _{BE}	V _{CE} =2V, I _C =1.5A			1.5	V
Transition frequency	f _T	V _{CE} =2V, I _C =0.2A		180		MHz

*Pulse test: pulse width ≤300μs, duty cycle ≤ 2.0%.

CLASSIFICATION OF h_{FE(1)}

RANK	B	C	D
RANGE	60-120	100-200	160-320