



TO-220 Plastic-Encapsulate Transistors

2SD2061 TRANSISTOR (NPN)

FEATURES

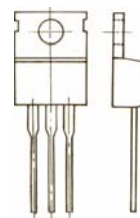
- Low saturation voltage
- Excellent DC current gain characteristic

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

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_{C}	Collector Current -Continuous	3	A
P_{C}	Collector Power Dissipation	2	W
T_{j}	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55-150	$^{\circ}\text{C}$

TO-220

1. BASE
2. COLLECTOR
3. EMITTER



1 2 3

ELECTRICAL CHARACTERISTICS ($T_{\text{amb}}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	$I_{\text{C}}=50\mu\text{A}$, $I_{\text{E}}=0$	80			V
Collector-emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	$I_{\text{C}}=1\text{mA}$, $I_{\text{B}}=0$	60			V
Emitter-base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	$I_{\text{E}}=50\mu\text{A}$, $I_{\text{C}}=0$	5			V
Collector cut-off current	I_{CBO}	$V_{\text{CB}}=60\text{V}$, $I_{\text{E}}=0$			10	μA
Emitter cut-off current	I_{EBO}	$V_{\text{EB}}=4\text{V}$, $I_{\text{C}}=0$			10	μA
DC current gain	$h_{\text{FE}(1)}$	$V_{\text{CE}}=5\text{V}$, $I_{\text{C}}=0.5\text{A}$	100		320	
Collector-emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_{\text{C}}=2\text{A}$, $I_{\text{B}}=0.2\text{A}$			1	V
Base-emitter saturation voltage	$V_{\text{BE(sat)}}$	$I_{\text{C}}=2\text{A}$, $I_{\text{B}}=0.2\text{A}$			1.5	V
Transition frequency	f_{T}	$V_{\text{CE}}=5\text{V}$, $I_{\text{C}}=0.5\text{A}$, $f=5\text{MHz}$		8		MHz
Collector output capacitance	C_{ob}	$V_{\text{CB}}=10\text{V}$, $I_{\text{E}}=0$, $f=1\text{MHz}$		70		pF

Typical Characteristics

2SD2061

