

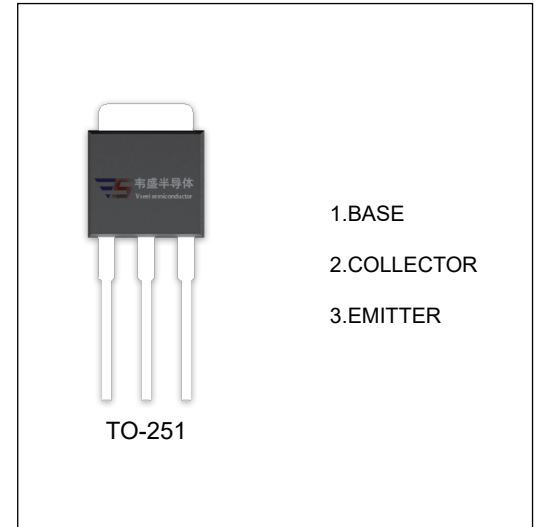
2SD1760 TRANSISTOR (NPN)

FEATURES

- Low $V_{CE(sat)}$
- Complements the 2SB1184

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	3	A
P_C	Collector Power Dissipation	1.5	W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55 to +150	$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS ($T_a=25\text{ }^\circ\text{C}$ unless other wise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=50\mu\text{A}, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=50\mu\text{A}, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=40\text{V}, I_E=0$			1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4\text{V}, I_C=0$			1	μA
DC current gain	h_{FE}	$V_{CE}=3\text{V}, I_C=500\text{mA}$	82		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=2\text{A}, I_B=200\text{mA}$			1	V
Transition frequency	f_T	$V_{CE}=5\text{V}, I_C=500\text{mA}, f=30\text{MHz}$		90		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		40		pF

CLASSIFICATION of h_{FE}

Rank	P	Q	R
Range	82-180	120-270	180-390