

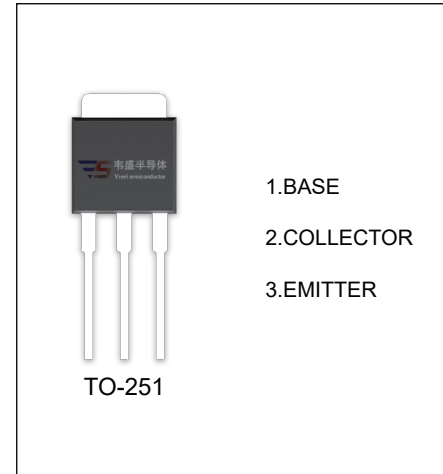
## 2SB1261-Z TRANSISTOR (PNP)

### FEATURES

- High  $h_{FE}$
- Low  $V_{CE(sat)}$

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

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	-60	V
$V_{CEO}$	Collector-Emitter Voltage	-60	V
$V_{EBO}$	Emitter-Base Voltage	-7	V
$I_C$	Collector Current -Continuous	-3	A
$P_D$	Collector Power Dissipation	1	W
$T_J, T_{stg}$	Operation Junction and Storage Temperature Range	-55-150	$^\circ\text{C}$



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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu\text{A}, I_E=0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1\text{mA}, I_B=0$	-60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu\text{A}, I_C=0$	-7			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-60\text{V}, I_E=0$			-10	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-7\text{V}, I_C=0$			-10	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE}=-2\text{V}, I_C=-200\text{mA}$	60			
	$h_{FE(2)}$	$V_{CE}=-2\text{V}, I_C=-600\text{mA}$	100		400	
	$h_{FE(3)}$	$V_{CE}=-2\text{V}, I_C=-2\text{A}$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-1.5\text{A}, I_B=-150\text{mA}$			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-1.5\text{A}, I_B=-150\text{mA}$			-1.2	V
Transition frequency	$f_T$	$V_{CE}=-5\text{V}, I_C=-1.5\text{A}$		50		MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$		40		pF
Switching Time	Turn on Time	$t_{on}$		0.5		$\mu\text{s}$
	Storage Time	$t_{stg}$	$V_{CC}=-10\text{V}, I_C=-1\text{A}, I_{B1}=-I_{B2}=-0.1\text{A}, R_L=10\Omega$	2.0		
	Fall Time	$t_f$		0.5		

### CLASSIFICATION OF $h_{FE(2)}$

Rank	M	L	K
Range	100-200	160-320	200-400