

# 2SD2620J

## Silicon NPN epitaxial planer type

For low-frequency amplification

### ■ Features

- High forward current transfer ratio  $h_{FE}$
- Low collector to emitter saturation voltage  $V_{CE(sat)}$
- High emitter to base voltage  $V_{EBO}$
- SS-mini type package

### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector to base voltage	$V_{CBO}$	100	V
Collector to emitter voltage	$V_{CEO}$	100	V
Emitter to base voltage	$V_{EBO}$	15	V
Peak collector current	$I_{CP}$	50	mA
Collector current	$I_C$	20	mA
Collector power dissipation	$P_C$	125	mW
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = 60\text{ V}, I_E = 0$			0.1	$\mu\text{A}$
	$I_{CEO}$	$V_{CE} = 60\text{ V}, I_B = 0$			1.0	$\mu\text{A}$
Collector to base voltage	$V_{CBO}$	$I_C = 10\ \mu\text{A}, I_E = 0$	100			V
Collector to emitter voltage	$V_{CEO}$	$I_C = 1\text{ mA}, I_B = 0$	100			V
Emitter to base voltage	$V_{EBO}$	$I_E = 10\ \mu\text{A}, I_C = 0$	15			V
Forward current transfer ratio	$h_{FE}$	$V_{CE} = 10\text{ V}, I_C = 2\text{ mA}$	400		1 200	
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = 10\text{ mA}, I_B = 1\text{ mA}$		0.05	0.2	V
Transition frequency	$f_T$	$V_{CB} = 10\text{ V}, I_E = -2\text{ mA}, f = 200\text{ MHz}$		200		MHz
Noise voltage	NV	$V_{CE} = 10\text{ V}, I_C = 1\text{ mA}, GB = 80\text{ dB}$ $R_g = 100\text{ k}\Omega, \text{Function} = \text{FLAT}$		80		mV

