

# Silicon NPN Transistor

## **KSD526**

Power Amplifier Transistor

80V / 4A

# DATASHEET

OEM – Samsung

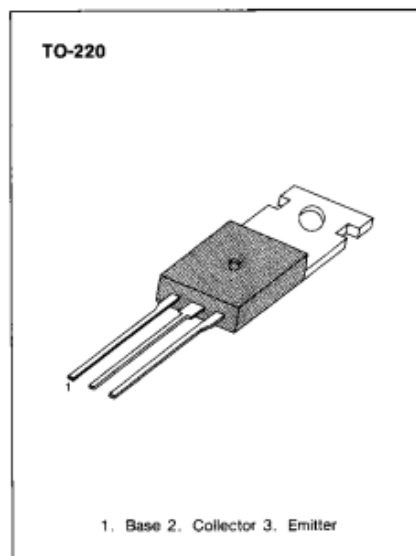
Source: Samsung CD 1995

## POWER AMPLIFIER APPLICATIONS

- Complement to KSB596

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CB0}$	80	V
Collector-Emitter Voltage	$V_{CE0}$	80	V
Emitter-Base Voltage	$V_{EB0}$	5	V
Collector Current	$I_C$	4	A
Base Current	$I_B$	0.4	A
Collector Dissipation ( $T_c=25^\circ\text{C}$ )	$P_C$	30	W
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55~150	$^\circ\text{C}$



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

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Collector Cutoff Current	$I_{CB0}$	$V_{CB}=80\text{V}, I_E=0$			30	$\mu\text{A}$
Emitter Cutoff Current	$I_{EB0}$	$V_{EB}=5\text{V}, I_C=0$			100	$\mu\text{A}$
Collector-Emitter Breakdown Voltage	$BV_{CE0}$	$I_C=50\text{mA}, I_B=0$	80			V
Emitter Base Breakdown Voltage	$BV_{EB0}$	$I_E=10\text{mA}, I_C=0$	5			V
DC Current Gain	$h_{FE1}$	$V_{CE}=5\text{V}, I_C=0.5\text{A}$	40		240	
	$h_{FE2}$	$V_{CE}=5\text{V}, I_C=3\text{A}$	15	50		
Collector-Emitter Saturation Voltage	$V_{CE}(\text{sat})$	$I_C=3\text{A}, I_B=0.3\text{A}$		0.45	1.5	V
Base Emitter On Voltage	$V_{BE}(\text{on})$	$V_{CE}=5\text{V}, I_C=3\text{A}$		1	1.5	V
Current Gain-Bandwidth Product	$f_T$	$V_{CE}=5\text{V}, I_C=0.5\text{A}$	3	8		MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		90		pF

## $h_{FE}(1)$ CLASSIFICATION

Classification	R	O	Y
$h_{FE}(1)$	40-80	70-140	120-240

