

# KST20

# NPN EPITAXIAL SILICON TRANSISTOR

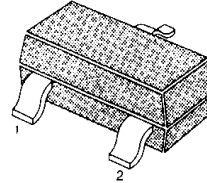
## GENERAL PURPOSE TRANSISTOR

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

Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage	$V_{CEO}$	40	V
Emitter-Base Voltage	$V_{EBO}$	4	V
Collector Current	$I_C$	100	mA
Collector Dissipation	$P_C$	350	mW
Storage Temperature	$T_{STG}$	150	$^\circ\text{C}$

• Refer to KST3904 for graphs

SOT-23

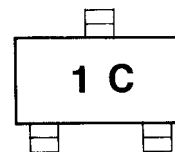


1. Base 2. Emitter 3. Collector

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

Characteristic	Symbol	Test Conditions	Min	Max	Unit
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=1.0\text{mA}, I_B=0$	40		V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E=100\mu\text{A}, I_C=0$	4		V
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=30\text{V}, I_E=0$		100	nA
DC Current Gain	$h_{FE}$	$V_{CE}=10\text{V}, I_C=5\text{mA}$	40	400	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.25	V
Current-Gain Bandwidth Product	$f_T$	$I_C=50\text{mA}, V_{CE}=10\text{V}$	125		MHz
Output Capacitance	$C_{CB}$	$V_{CB}=10\text{V}, I_E=0$ $f=100\text{KHz}$		4	pF

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