

# KST20

# NPN EPITAXIAL SILICON TRANSISTOR

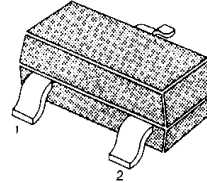
## GENERAL PURPOSE TRANSISTOR

### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Emitter Voltage	V <sub>CEO</sub>	40	V
Emitter-Base Voltage	V <sub>EBO</sub>	4	V
Collector Current	I <sub>C</sub>	100	mA
Collector Dissipation	P <sub>C</sub>	350	mW
Storage Temperature	T <sub>STG</sub>	150	°C

• Refer to KST3904 for graphs

SOT-23

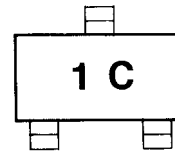


1. Base 2. Emitter 3. Collector

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C)

Characteristic	Symbol	Test Conditions	Min	Max	Unit
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	I <sub>C</sub> =1.0mA, I <sub>B</sub> =0	40		V
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	I <sub>E</sub> =100μA, I <sub>C</sub> =0	4		V
Collector Cut-off Current	I <sub>CBO</sub>	V <sub>CB</sub> =30V, I <sub>E</sub> =0		100	nA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =5mA	40	400	
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1.0mA		0.25	V
Current-Gain Bandwidth Product	f <sub>T</sub>	I <sub>C</sub> =50mA, V <sub>CE</sub> =10V	125		MHz
Output Capacitance	C <sub>CB</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0 f=100KHz		4	pF

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