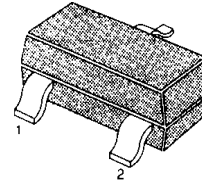


KST5088/5089**NPN EPITAXIAL SILICON TRANSISTOR****LOW NOISE TRANSISTOR****ABSOLUTE MAXIMUM RATINGS (T_A=25 °C)**

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CBO}	35	V
:KST5088		30	V
:KST5089			
Collector-Emitter Voltage	V _{CEO}	30	V
:KST5088		25	V
:KST5089			
Emitter-Base Voltage	V _{EBO}	4.5	V
Collector Current	I _C	50	mA
Collector Dissipation	P _C	350	mW
Storage Temperature	T _{STG}	150	°C

SOT-23



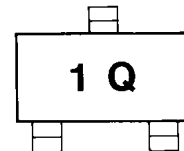
1. Base 2. Emitter 3. Collector

ELECTRICAL CHARACTERISTICS (T_A=25 °C)

Characteristic	Symbol	Test Conditions	Min	Max	Unit
Collector-Base Breakdown Voltage	BV _{CBO}	I _C =100 μA, I _E =0	35		V
:KST5088			30		V
:KST5089					
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =1mA, I _B =0	30		V
:KST5088			25		V
:KST5089					
Collector Cut-off Current	I _{CBO}	V _{CB} =20V, I _E =0		50	nA
:KST5088		V _{CB} =15V, I _E =0		50	nA
:KST5089		V _{BE} =3V, I _C =0		50	nA
Emitter Cut-off Current	I _{EBO}				
DC Current Gain	h _{FE}	V _{CE} =5V, I _C =100 μA	300	900	
:KST5088			400	1,200	
:KST5089					
		V _{CE} =5V, I _C =1mA	350		
			450		
		V _{CE} =5V, I _C =10mA	300		
			400		
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =10mA, I _B =1mA		0.5	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =10mA, I _B =1mA		0.8	V
Current Gain-Bandwidth Product	f _T	V _{CE} =5V, I _C =500 μA	50		MHz
		f=20MHz			
Collector-Base Capacitance	C _{OB}	V _{CB} =5V, I _E =0, f=100KHz		4	pF
Noise Figure	NF	I _C =100 μA, V _{CE} =5V		3	dB
:KST5088		R _S =10kΩ		2	dB
:KST5089		f=10Hz to 15.7KHz			

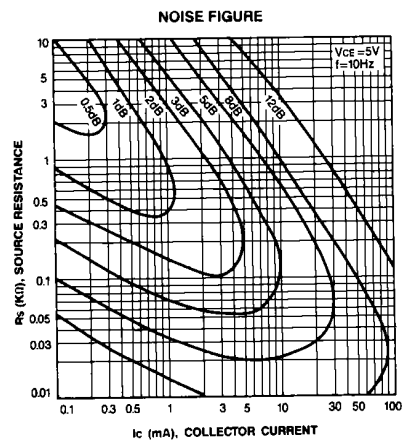
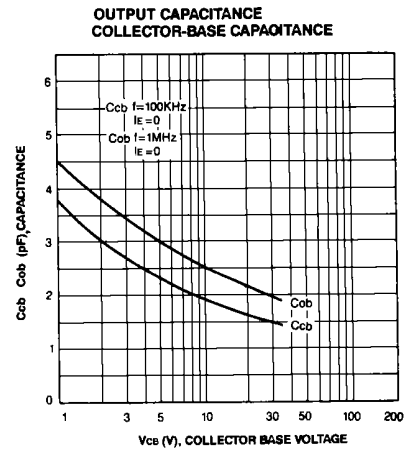
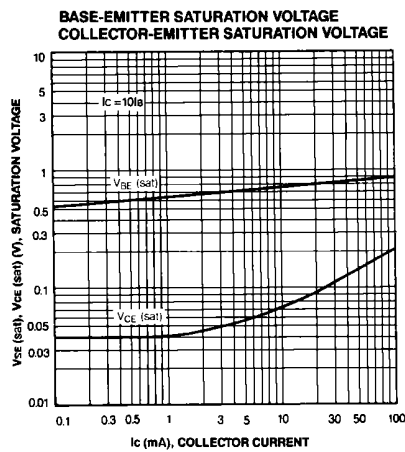
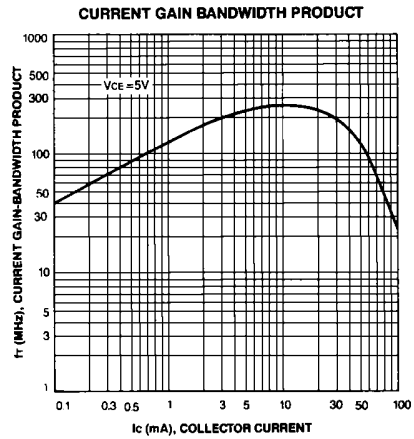
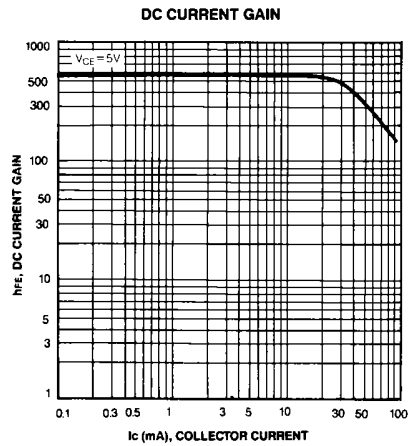
MARKING CODE

TYPE	KST5088	KST5089
MARK	1Q	1R

Marking

KST5088/5089

NPN EPITAXIAL SILICON TRANSISTOR



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