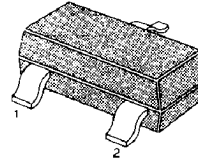


KST3903/3904**NPN EPITAXIAL SILICON TRANSISTOR****GENERAL PURPOSE TRANSISTOR****ABSOLUTE MAXIMUM RATINGS (T_A=25°C)**

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CBO}	-60	V
Collector-Emitter Voltage	V _{CEO}	-40	V
Emitter-Base Voltage	V _{EBO}	-6	V
Collector Current	I _C	-200	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)

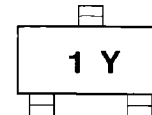
Characteristic	Symbol	Test Conditions	Min	Max	Unit
Collector-Base Breakdown Voltage	BV _{CBO}	I _C =10μA, I _E =0	60		V
* Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =1mA, I _B =0	40		V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E =10μA, I _C =0	6		V
Collector Cut-off Current	I _{CEX}	V _{CE} =30V, V _{EB} =3V		50	nA
* DC Current Gain	h _{FE}	V _{CE} =1V, I _C =0.1mA	20		
: KST3903			40		
: KST3904		V _{CE} =1V, I _C =1mA	35		
: KST3903			70		
: KST3904		V _{CE} =1V, I _C =10mA	50	150	
: KST3903			100	300	
: KST3904		V _{CE} =1V, I _C =50mA	30		
: KST3903			60		
: KST3904		V _{CE} =1V, I _C =100mA	15		
* Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =10mA, I _B =1mA	30	0.2	V
		I _C =50mA, I _B =5mA		0.3	V
* Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =10mA, I _B =1mA	0.65	0.85	V
		I _C =50mA, I _B =5mA		0.95	V
Output Capacitance	C _{OB}	V _{CB} =5V, I _E =0, f=1MHz		4	pF
Current Gain-Bandwidth Product	f _T	V _{CE} =20V, I _C =10mA			
: KST3903		f=100MHz	250		MHz
: KST3904			300		MHz
Noise Figure	NF	I _C =100μA, V _{CE} =5V, R _S =1KΩ			
: KST3903		f=10Hz to 15.7KHz		6	dB
: KST3904				5	dB
Turn On Time	T _{ON}	V _{CC} =3V, V _{BE} =0.5V		70	ns
		I _C =10mA, I _{B1} =1mA			
Turn Off Time	T _{OFF}	V _{CC} =3V, I _C =10mA		225	ns
: KST3903		I _{B1} =I _{B2} =1mA		250	ns
: KST3904					

* Pulse Test: Pulse Width≤300μs, Duty Cycle≤2%

MARKING CODE

TYPE	KST3903	KST3904
MARK	1Y	1A

Marking



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Rev. B

