

BCW71

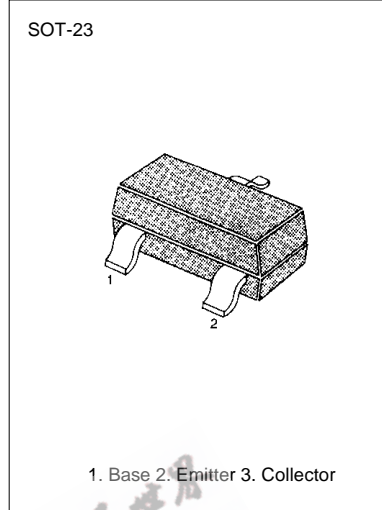
NPN EPITAXIAL SILICON TRANSISTOR

GENERAL PURPOSE TRANSISTOR

ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	50	V
Collector-Emitter Voltage	V _{CEO}	45	V
Emitter-Base Voltage	V _{EBO}	5	V
Collector Current	I _C	100	mA
Collector Dissipation	P _C	350	mW
Storage Temperature	T _{STG}	150	°C

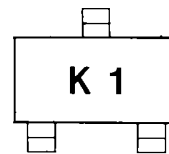
• Refer to KST2222 for graphs



ELECTRICAL CHARACTERISTICS (T_A=25°C)

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV _{CB0}	I _C =10μA, I _E =0	50			V
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =2mA, I _B =0	45			V
Collector-Emitter Breakdown Voltage	BV _{CES}	I _C =2mA, V _{EB} =0	45			V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E =10μA, I _C =0	5			V
Collector Cut-off Current	I _{CB0}	V _{CB} =20V, I _E =0			100	nA
DC Current Gain	h _{FE}	V _{CE} =5V, I _C =2mA	110		220	
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =10mA, I _B =0.5mA I _C =50mA, I _B =2.5mA		0.21 0.85	0.25	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =50mA, I _B =2.5mA		0.85		V
Base-Emitter On Voltage	V _{BE(on)}	I _C =2mA, V _{CE} =5V	0.6		0.75	V
Current Gain Bandwidth Product	f _T	V _{CE} =5V, I _C =10mA f=35MHz		300		MHz
Output Capacitance	C _{OB}	V _{CB} =10V, I _E =0 f=1MHz			4	pF
Noise Figures	NF	V _{CE} =5V, I _C =2.0mA R _G =2KΩ, f=1KHz			10	dB

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