



# 《风光欣》技术资料

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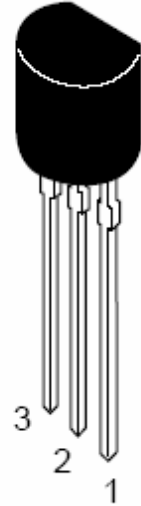
## KSP10

## NPN EPITAXIAL SILICON TRANSISTOR

AMPLIFIER TRANSISTOR

### ABSOLUTE MAXIMUM RATINGS(TA=25 )

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V <sub>CB0</sub>	30	V
Collector-Emitter Voltage	V <sub>CEO</sub>	25	V
Emitter -Base Voltage	V <sub>EBO</sub>	3	V
Collector Dissipation(Ta=25 )	P <sub>c</sub>	350	mW
Derate above 25		2.8	mW/
Collector Dissipation (Ta=25 )	P <sub>c</sub>	1	W
Derate above25		8	W/
Junction Temperature	T <sub>J</sub>	150	
Storage Temperature	T <sub>STG</sub>	-55 ~150	
Themal Resistance.Junction to Case	R <sub>th(j-c)</sub>	125	/W
Themal Resistance.Junction to Ambie	R <sub>th(j-c)</sub>	357	/W



1.Base 2.Emitter 3.Collector

### ELECTRCAL CHARACTERISTICS(TA=25 )

Characteristic	Symbol	Test Conditions	Min	Max	Unit
Collector- Baser Breakdown Voltage	BV <sub>CB0</sub>	I <sub>c</sub> = 100uA,I <sub>E</sub> = 0	30		V
Collector- Emitter Breakdown Voltage	BV <sub>CEO</sub>	I <sub>c</sub> = 1mA,I <sub>B</sub> =0	25		
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	I <sub>E</sub> = 10μA,I <sub>c</sub> =0	3		
Collector-Cut-off Current	I <sub>CB0</sub>	V <sub>CB</sub> =25V,I <sub>E</sub> =0		100	nA
Emitter-Cut-off Current	I <sub>EBO</sub>	V <sub>EB</sub> =2V,I <sub>c</sub> =0		100	nA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =10V,I <sub>c</sub> =4mA	60		
Collector- Emitter Saturation Voltage	V <sub>CE(sat)</sub>	I <sub>c</sub> = 4mA,I <sub>B</sub> = 0.4mA		0.5	V
Basa- Emitter On Voltage	V <sub>BE(sat)</sub>	V <sub>CE</sub> = 10V,I <sub>c</sub> = 4mA		0.95	V
Current Gain Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> = 10V,I <sub>c</sub> = 4mA	650		MHZ
Collector Base Capacitance	C <sub>CB</sub>	V <sub>CB</sub> = 10V,I <sub>E</sub> = 0,f=1MHZ		0.7	pF
Collector Base Feedback Capacitance	C <sub>RB</sub>	V <sub>CB</sub> = 10V,I <sub>E</sub> = 0,f=1MHZ	0.35	0.65	pF
Collector Base Time Constant	C <sub>c.rbb'</sub>	V <sub>CB</sub> = 10V,I <sub>c</sub> = 4mA, f=31.8MHZ		9	ps