



# 《风光欣》技术资料

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## STD123UF

## NPN SILICON TRANSISTOR

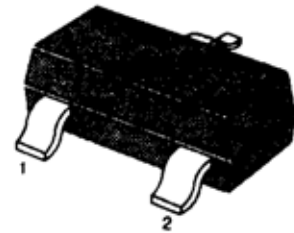
### Features

- Low saturation medium current application
- Extremely low collector saturation voltage
- Suitable for low voltage large current drivers
- High DC current gain and large current capability
- Low on resistance:  $R_{ON}=0.6$  (Max.) ( $I_B=1mA$ )

### ABSOLUTE MAXIMUM RATINGS( $T_A=25$ )

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	$V_{CBO}$	20	V
Collector-Emitter Voltage	$V_{CEO}$	15	V
Emitter -Base Voltage	$V_{EBO}$	6.5	V
Collector Current	$I_c$	1	A
Collector Dissipation	$P_c$	350	mW
Junction Temperature	$T_J$	150	
Storage Temperature	$T_{STG}$	-55 ~150	

SOT-323



1.Base 2. Emitter 3. Collector

### ELECTRICAL CHARACTERISTICS ( $T_A=25$ )

Characteristic	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_c= 50 \mu A, I_E=0$	20			V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_c= 1mA, I_B=0$	15			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E= 50 \mu A, I_c=0$	6.5			V
Collector Cut-off Current	$I_{CBO}$	$V_{CB}= 20V, I_E=0$			100	nA
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}= 6V, I_c=0$			100	nA
DC Current Gain	$H_{FE}$	$V_{CE}= 1V, I_c= 100mA$	200		450	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_c= 500mA, I_B= 50mA$		0.1	0.3	V
Transition Frequency	$f_T$	$V_{CE}= 5V, I_c= 50mA$		260		MHz
Collector Output Capacitance	$C_{ob f=1MHz}$	$V_{CB}= 10V, I_E= 0$		5		pF
On resistance	$R_{ON}$	$f=1KHz, I_B=1mA, V_{IN}=0.3V$		0.6		