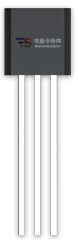
STC128 TRANSISTOR (NPN)



TO-92

1.EMITTER
2.COLLECTOR
3.BASE

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

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
STC128	TO-92	Bulk	1000pcs/Bag
STC128-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	20	V
V_{CEO}	Collector-Emitter Voltage	15	V
V_{EBO}	Emitter-Base Voltage	6.5	V
I_C	Collector Current	1	A
P_C	Collector Power Dissipation	625	mW
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	200	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

T_a=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=50μA, I_E=0	20			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA, I_B=0	15			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=50μA, I_C=0	6.5			V
Collector cut-off current	I_{CBO}	V_{CB}=20V, I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=6V, I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE}=1V, I_C=100mA	150			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=500mA, I_B=50mA			0.3	V
Transition frequency	f_T	V_{CE}=5V,I_C=50mA		260		MHz
Collector output capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz		5		pF