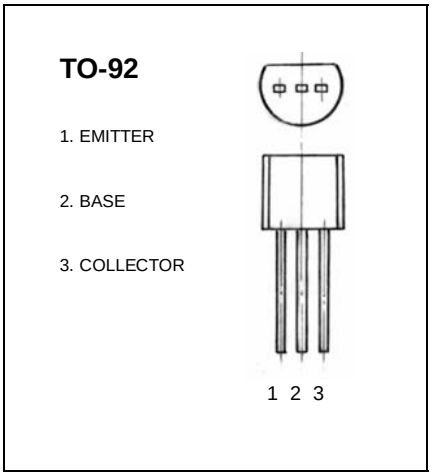
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-92 Plastic-Encapsulate Transistors

S9016 TRANSISTOR (NPN)



FEATURES

Power dissipation

$P_{CM:}$ 0.3 W (Tamb=25℃)

Collector current

$I_{CM:}$ 0.025 A

Collector-base voltage

$V_{(BR)CBO}$: 30 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to +150℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V(BR)_{CBO}$	Ic= 100μA, I_E=0	30			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	Ic= o.1mA, I_B=0	20			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	I_E= 100μA, I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}= 30V, I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 3V, I_C=0			0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=5V, I_C= 1mA	28		270	
Collector-emitter saturation voltage	V_{CE}(sat)	I_C= 10mA, I_B= 1mA			0.3	V
Transition frequency	f_T	V_{CE}= 5V, I_C= 1mA f =100MHz	300			MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	D	E	F	G	H	I	J
Range	28-45	39-60	54-80	72-108	97-146	132-198	180-270