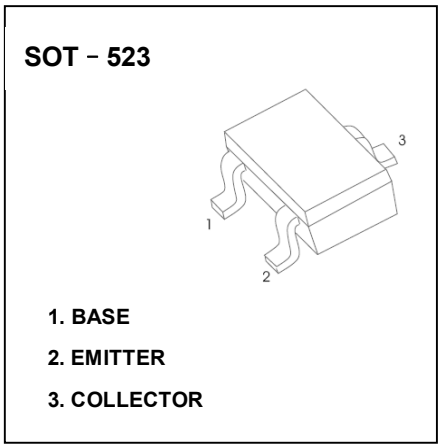
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-523 Plastic-Encapsulate Transistors

2SC4618 TRANSISTOR (NPN)



FEATURES

- High Voltage and Current
- High DC Current Gain
- Complementary to 2SC4738
- Small Package

APPLICATIONS

- General Purpose Amplification

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	50	mA
P_C	Collector Power Dissipation	150	mW
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	833	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55～+150	℃

ELECTRICAL CHARACTERISTICS (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	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA, I_B=0	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=50μA, I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=24V, I_E=0			500	nA
Emitter cut-off current	I_{EBO}	V_{EB}=3V, I_C=0			500	nA
DC current gain	h_{FE}	V_{CE}=6V, I_C=1mA	56		270	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=10mA, I_B=1mA			0.3	V
Transition frequency	f_T	V_{CE}=6V,I_C=1mA , f=100MHz	150			MHz
Collector output capacitance	C_{ob}	V_{CB}=6V, I_E=0, f=1MHz			2.2	pF

CLASSIFICATION OF h_{FE}

RANK	N	P	Q
RANGE	56－120	82－180	120－270
MARKING	AN	AP	AQ