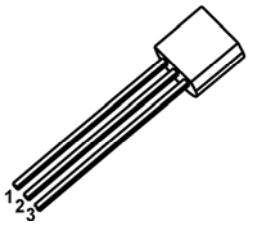
JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-92 Plastic-Encapsulate Transistors

TO – 92



2SC1675 TRANSISTOR (NPN)

FEATURES

- Low Collector Current
- General Purpose Switching and Amplification

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	50	mA
P_C	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	℃/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= 10μA,I_E=0	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=5mA,I_B=0	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=10μA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=50V,I_E=0			100	nA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			100	nA
DC current gain	h_{FE}	V_{CE}=6V, I_C=1mA	40		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=10mA,I_B=1mA			0.3	V
Base-emitter voltage	V_{BE}	V_{CE}=6V, I_C=1mA			0.75	V
Collector output capacitance	C_{ob}	V_{CB}=6V,I_E=0, f=1MHz			2.5	pF
Transition frequency	f_T	V_{CE}=6V,I_C=1mA	150			MHz

CLASSIFICATION OF h_{FE}

RANK	R	O	Y
RANGE	40-80	70-140	120-240

A,Dec,2010