



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-92S Plastic-Encapsulate Transistors

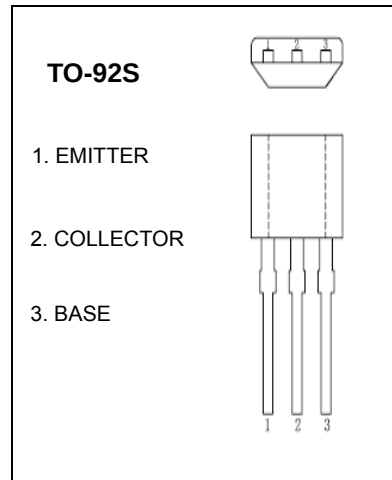
2SD2470 TRANSISTOR (NPN)

FEATURES

- Low saturation voltage

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	15	V
V_{CEO}	Collector-Emitter Voltage	10	V
V_{EBO}	Emitter-Base Voltage	8	V
I_{C}	Collector Current –Continuous	5	A
P_{C}	Collector Power Dissipation	400	mW
T_{J}	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55-150	$^{\circ}\text{C}$



ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	$I_{\text{C}}=50\mu\text{A}$, $I_{\text{E}}=0$	15			V
Collector-emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	$I_{\text{C}}=1\text{mA}$, $I_{\text{B}}=0$	10			V
Emitter-base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	$I_{\text{E}}=50\mu\text{A}$, $I_{\text{C}}=0$	8			V
Collector cut-off current	I_{CBO}	$V_{\text{CB}}=10\text{V}$, $I_{\text{E}}=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{\text{EB}}=8\text{V}$, $I_{\text{C}}=0$			0.5	μA
DC current gain	h_{FE}	$V_{\text{CE}}=2\text{V}$, $I_{\text{C}}=2\text{A}$	270		820	
Collector-emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_{\text{C}}=3\text{A}$, $I_{\text{B}}=0.1\text{A}$			0.5	V
Transition frequency	f_{T}	$V_{\text{CE}}=6\text{V}$, $I_{\text{C}}=50\text{mA}$, $f=100\text{MHz}$		170		MHz
Collector output capacitance	C_{ob}	$V_{\text{CB}}=10\text{V}$, $I_{\text{E}}=0$, $f=1\text{MHz}$		30		pF

Typical Characteristics

2SD2470

