



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

TO-92 Plastic-Encapsulate Transistors

D965 TRANSISTOR (NPN)

FEATURES

Power dissipation

$$P_{CM}: 0.75 \text{ W (Tamb=25}^{\circ}\text{C)}$$

Collector current

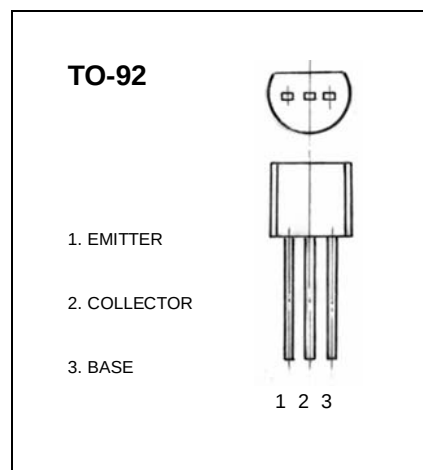
$$I_{CM}: 5 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO}: 42 \text{ V}$$

Operating and storage junction temperature range

$$T_J, T_{stg}: -55^{\circ}\text{C to } +150^{\circ}\text{C}$$



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1\text{mA}, I_E=0$	42			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	22			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=30\text{V}, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=6\text{V}, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=2\text{V}, I_C=0.15\text{mA}$	150			
	$h_{FE(2)}$	$V_{CE}=2\text{V}, I_C=500\text{mA}$	340		950	
	$h_{FE(3)}$	$V_{CE}=2\text{V}, I_C=2000\text{mA}$	150			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=3000\text{mA}, I_B=100\text{mA}$			0.35	V

CLASSIFICATION OF $h_{FE(2)}$

Rank	R	T
Range	340-600	560-950