



TO-92 Plastic-Encapsulate Transistors

C1027 TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM} : 0.125 W ($T_{amb}=25^{\circ}C$)

Collector current

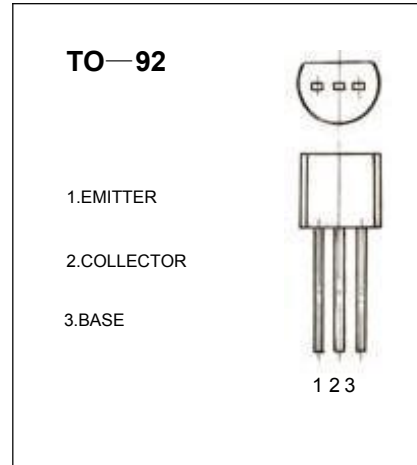
I_{CM} : 0.8 A

Collector-base voltage

$V_{(BR)CBO}$: 120 V

Operating and storage junction temperature range

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



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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	120			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10mA, I_B=0$	120			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=120V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
DC current gain(note)	H_{FE}	$V_{CE}=5V, I_C=100mA$	80		240	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$			1	V
Base-emitter voltage	V_{BE}	$V_{CE}=5V, I_C=500mA$			1	V
Transition frequency	f_r	$V_{CE}=5V, I_C=100mA$		120		MHz

CLASSIFICATION OF

$H_{FE(1)}$

Rank	1	2	3
Range	80-140	140-180	180-240