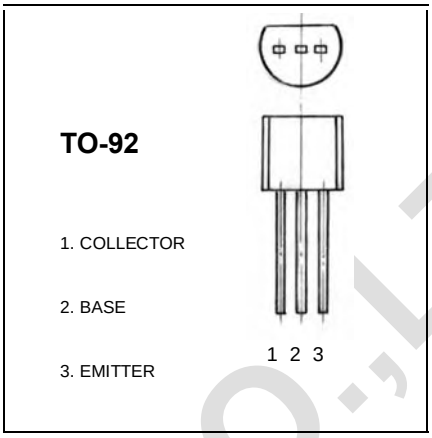
BC337,-16,-25,-40 TRANSISTOR (NPN)

BC338, -16,-25,-40



FEATURES

Power dissipation

$P_{CM:}$ 0.625 W (Tamb=25℃)

Collector current

$I_{CM:}$ 0.8 A

Collector-base voltage

V_{CBO}: BC337 50 V

BC338 30 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to +150℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V_{CBO}	Ic= 100μA, I_E=0				
BC337			50			V
BC338			30			V
Collector-emitter breakdown voltage		I_C= 10 mA , I_B=0				
BC337	V_{CEO}		45			V
BC338			25			V
Emitter-base breakdown voltage	V_{EBO}	I_E= 10μA, I_C=0	5			V
Collector cut-off current	I_{CBO}					
BC337		V_{CB}= 45 V, I_E=0			0.1	μA
BC338		V_{CB}= 25V, I_E=0			0.1	μA
Collector cut-off current						
BC337	I_{CEO}	V_{CE}= 40 V, I_B=0			0.2	μA
BC338		V_{CE}= 20 V, I_B=0			0.2	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 4 V, I_C=0			0.1	μA
DC current gain						
BC337/BC338	$h_{FE(1)}$	V_{CE}=1V, I_C= 100mA	100		630	
BC337-16/BC338-16			100		250	
BC337-25/BC338-25			160		400	
BC337-40/BC338-40			250		630	
	$H_{FE(2)}$	V_{CE}=1V, I_C= 300mA	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=500 mA, I_B= 50 mA			0.7	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C= 500 mA, I_B=50 mA			1.2	V
Transition frequency	f_T	V_{CE}= 5V, I_C= 10mA f = 100MHz	210			MHz