

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

BC338, -16,-25,-40

FEATURES

Power dissipation

P_{CM} : 0.625 W ($T_{amb}=25^{\circ}C$)

Collector current

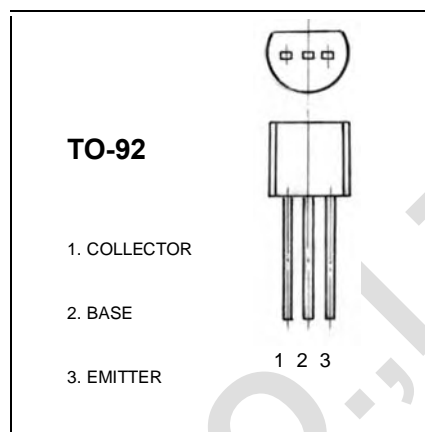
I_{CM} : 0.8 A

Collector-base voltage

V_{CBO} : BC337 50 V
BC338 30 V

Operating and storage junction temperature range

T_J, T_{stg} : $-55^{\circ}C$ 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_{CBO}	$I_C=100\mu A, I_E=0$	50			V			
							BC337		
	BC338		30			V			
Collector-emitter breakdown voltage	V_{CEO}	$I_C=10\text{ mA}, I_B=0$	45			V			
							BC337		
	BC338		25			V			
Emitter-base breakdown voltage	V_{EBO}	$I_E=10\mu A, I_C=0$	5			V			
Collector cut-off current	I_{CBO}				0.1	μA			
							BC337		
	BC338				0.1	μA			
Collector cut-off current	I_{CEO}				0.2	μA			
							BC337		
	BC338				0.2	μA			
Emitter cut-off current	I_{EBO}	$V_{EB}=4\text{ V}, I_C=0$			0.1	μA			
DC current gain	$h_{FE(1)}$	$V_{CE}=1\text{ V}, I_C=100\text{ mA}$	100		630				
							BC337/BC338		
							BC337-16/BC338-16	100	250
							BC337-25/BC338-25	160	400
	BC337-40/BC338-40		250	630					
	$H_{FE(2)}$	$V_{CE}=1\text{ V}, I_C=300\text{ mA}$	60						
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500\text{ mA}, I_B=50\text{ mA}$			0.7	V			
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=500\text{ mA}, I_B=50\text{ mA}$			1.2	V			
Transition frequency	f_T	$V_{CE}=5\text{ V}, I_C=10\text{ mA}$ $f=100\text{ MHz}$	210			MHz			