

BC727 · BC728

PNP SILICON AF MEDIUM POWER TRANSISTORS

THE BC727, BC728 ARE PNP SILICON PLANAR EPITAXIAL TRANSISTORS FOR USE IN AF DRIVER AND OUTPUT STAGES, AS WELL AS FOR UNIVERSAL APPLICATIONS. THE BC727, BC728 ARE COMPLEMENTARY TO THE NPN TYPE BC737, BC738 RESPECTIVELY.

CASE TO-92A



ABSOLUTE MAXIMUM RATINGS

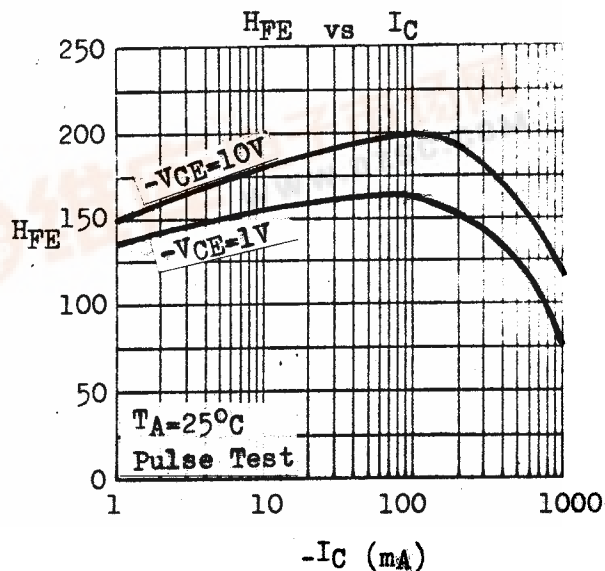
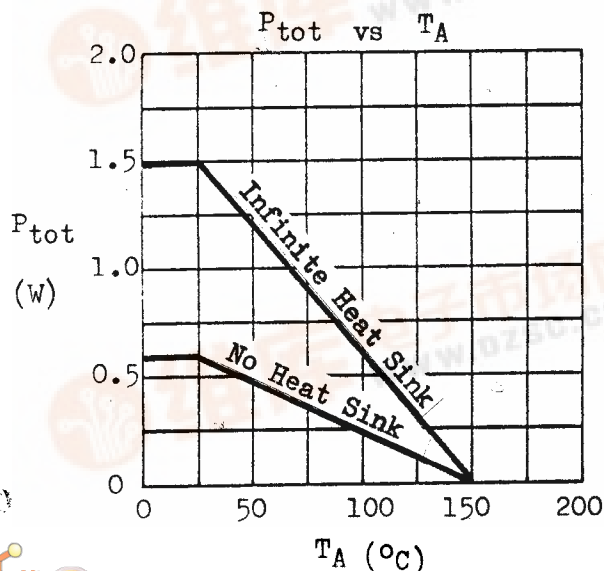
Collector-Base Voltage
Collector-Emitter Voltage
Emitter-Base Voltage
Collector Current
Collector Peak Current ($t \leq 10\text{ms}$)
Total Power Dissipation (@ $T_C \leq 25^\circ\text{C}$)
(@ $T_A \leq 25^\circ\text{C}$)
Operating Junction & Storage Temperature

	BC727	BC728
-V _{CBO}	50V	30V
-V _{CEO}	40V	25V
-V _{EBO}		5V
-I _C		1.5A
-I _{CM}		2.5A
P _{tot}	1.5W	625mW
T _j , T _{stg}	-55 to 150°C	

THERMAL RESISTANCE

Junction to Case
Junction to Ambient

θ_{jc}	83°C/W max.
θ_{ja}	200°C/W max.



ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	BC727			BC728			UNIT	TEST CONDITIONS
		MIN	TYP	MAX	MIN	TYP	MAX		
Collector-Base Breakdown Voltage	-BV _{CBO}	50			30			V	-I _C =0.1mA I _E =0
Collector-Emitter Breakdown Voltage	-LV _{CEO} *	40			25			V	-I _C =10mA I _B =0
Emitter-Base Breakdown Voltage	-BV _{EBO}	5			5			V	-I _E =0.1mA I _C =0
Collector Cutoff Current	-I _{CBO}		100		100			nA	-V _{CB} =40V I _E =0
								nA	-V _{CB} =25V I _E =0
Emitter Cutoff Current	-I _{EBO}		100		100			nA	-V _{EB} =4V I _C =0
Collector-Emitter Saturation Voltage	-V _{CE(sat)} *		0.7		0.7			V	-I _C =500mA -I _B =50mA
Base-Emitter Saturation Voltage	-V _{BE(sat)} *		1.2 1.3		1.2 1.3			V	-I _C =500mA -I _B =50mA
								V	-I _C =1A -I _B =0.1A
D.C. Current Gain	H _{FE} *	63	630		63	630			-I _C =100mA -V _{CE} =1V
		Group 10	63	160	63	160			
		Group 16	100	250	100	250			
		Group 25	160	400	160	400			
		Group 40	250	630	250	630			
	H _{FE} *	63			63				-I _C =500mA -V _{CE} =1V
		15			30				-I _C =1A -V _{CE} =1V
Current Gain-Bandwidth Product	f _T	40	120		40	120		MHz	-I _C =50mA -V _{CE} =10V
Collector-Base Capacitance	C _{ob}		17	20		17	20	pF	-V _{CB} =10V I _E =0 f=1MHz

* Pulse Test : Pulse Width=0.3mS, Duty Cycle=1%

