2N726 (SILICON)
2N727

PNP SILICON ANNULAR TRANSISTORS

. . . designed for general purpose audio amplifier applications.

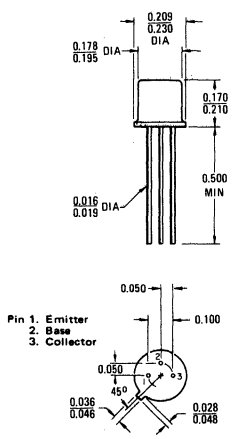
- Collector-Emitter Breakdown Voltage –
  BV_{CEO} = 20 Vdc (Min) @ I_C = 10 mAdc
- Low Output Capacitance –
  C_{ob} = 5.0 pF (Max) @ V_{CB} = 5.0 Vdc

PNP SILICON AMPLIFIER TRANSISTORS

***MAXIMUM RATINGS**

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CEO}	20	Vdc
Collector-Base Voltage	V_{CB}	25	Vdc
Emitter-Base Voltage	V_{EB}	5.0	Vdc
Collector Current – Continuous	I_C	50	mAdc
Total Device Dissipation @ T_A = 25°C Derate above 25°C	P_D	300 2.0	mW mW/°C
Total Device Dissipation @ T_C = 25°C Derate above 25°C	P_D	1.0 6.67	Watt mW/°C
Operating and Storage Junction Temperature Range	T_J,T_{stg}	-65 to +200	°C

*Indicates JEDEC Registered Data



Collector Connected to Case
CASE 22 (1)
(TO-18)

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

Characteristic		Symbol	Min	Max	Unit
OFF CHARACTERISTICS					
Collector-Emitter Breakdown Voltage(1) (I_C = 10 mAdc, I_B = 0)		BV_{CEO}	20	–	Vdc
Collector Cutoff Current (V_{CE} = 15 Vdc, I_B = 0)		I_{CEO}	–	5.0	μAdc
Collector Cutoff Current		I_{CBO}			μAdc
(V_{CB} = 25 Vdc, I_E = 0)			–	1.0	
(V_{CB} = 25 Vdc, I_E = 0, T_A = 150°C)			–	25	
Emitter Cutoff Current (V_{EB} = 5.0 Vdc, I_C = 0)		I_{EBO}	–	0.5	μAdc
ON CHARACTERISTICS					
DC Current Gain(1)		h_{FE}			–
(I_C = 10 mAdc, V_{CE} = 1.0 Vdc)	2N726		15	45	
	2N727		30	120	
(I_C = 10 mAdc, V_{CE} = 1.0 Vdc,	2N726		6.0	–	
T_A = -55°C)	2N727		12	–	
Collector-Emitter Saturation Voltage (I_C = 10 mAdc, I_B = 1.0 mAdc)		$V_{CE(sat)}$	–	0.6	Vdc
Base-Emitter Saturation Voltage (I_C = 10 mAdc, I_B = 1.0 mAdc)		$V_{BE(sat)}$	–	1.0	Vdc
DYNAMIC CHARACTERISTICS					
Current-Gain—Bandwidth Product(2) (I_C = 10 mAdc, V_{CE} = 10 Vdc, f = 100 MHz)		f_T	140	–	MHz
Output Capacitance (V_{CB} = 5.0 Vdc, I_E = 0, f = 1.0 MHz)		C_{ob}	–	5.0	pF
Small-Signal Current Gain		h_{fe}			–
(I_C = 10 mAdc, V_{CE} = 10 Vdc,	2N726		15	90	
f = 1.0 kHz)	2N727		30	240	

*Indicates JEDEC Registered Data.

(1)Pulse Test: Pulse Width = 300 μs, Duty Cycle ≤ 2.0%.

(2)f_T is defined as the frequency at which $|h_{fe}|$ extrapolates to unity.