PNP POWER TRANSISTORS

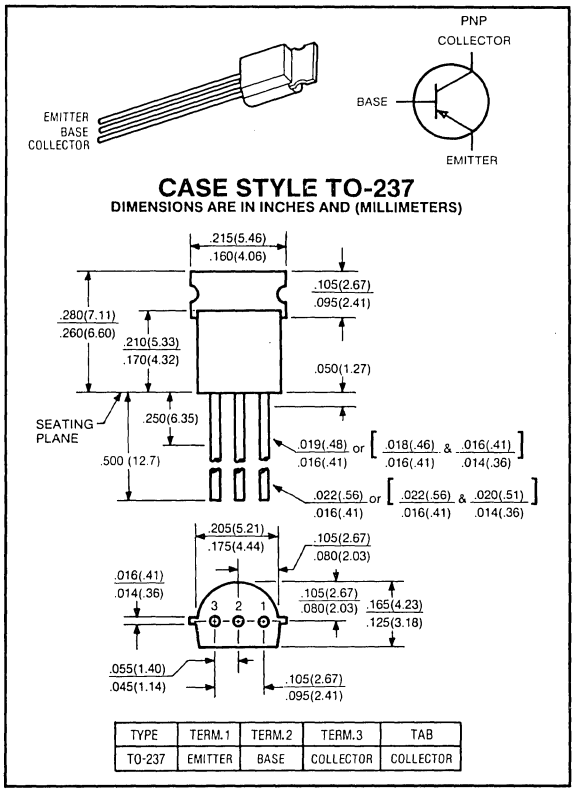
COMPLEMENTARY TO THE
2N6716, 17/92GU05, 06 SERIES

92GU55,56
2N6728,29

-60-(-80) VOLTS
2 AMPS, 1.2 WATTS

Applications:

- High V_{CE} ratings:
  92GU55 = 60V min. V_{CEO}
  92GU56 = 80V min. V_{CEO}
- Exceptional power-to-price ratio



TYPE	TERM.1	TERM.2	TERM.3	TAB
TO-237	EMITTER	BASE	COLLECTOR	COLLECTOR

maximum ratings (T_A = 25°C) (unless otherwise specified)

RATING	SYMBOL	92GU55/2N6728	92GU56/2N6729	UNITS
Collector-Emitter Voltage	V_{CEO}	-60	-80	Volts
Collector-Base Voltage	V_{CB}	-60	-80	Volts
Emitter Base Voltage	V_{EB}	-4.0	-4.0	Volts
Collector Current — Continuous	I_C	-2.0	-2.0	A
Total Power Dissipation @ T_A = 25°C	P_{DP}*	1.2	1.2	Watts
Operating and Storage Junction Temperature Range	T_J, T_{STG}	-55 to +150	-55 to +150	°C

thermal characteristics

Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	167	167	°C/W
Thermal Resistance, Junction to Case	$R_{\theta JC}$	50	50	°C/W

*P_{DP} = Practical Power Dissipation, i.e., that power which can be dissipated with the device installed in a typical manner on a printed circuit board with total copper run area equal to 1.0 in.^{2} minimum.

electrical characteristics (T_A = 25° C) (unless otherwise specified)

CHARACTERISTIC	SYMBOL	MIN	TYP	MAX	UNIT
off characteristics					
Collector-Emitter Sustaining Voltage 92GU55,2N6728 (I_C = -1.0mA, I_B = 0A) 92GU56,2N6729	$V_{CEO(sus)}$	-60 -80	— —	— —	Volts
Collector Cut-off Current (V_{CB} = -40V, I_E = 0) 92GU55,2N6728 (V_{CB} = -50V, I_E =0) 92GU56,2N6729	I_{CBO}	— —	— —	-.1 -.1	μA
Emitter Cutoff Current (V_{EB} = -4V, I_C = 0)	I_{EBO}	—	—	-100	μA
on characteristics					
DC Current Gain (I_C = -50mA, V_{CE} = -1V) (I_C = -250mA, V_{CE} = -1V) (I_C = -500mA, V_{CE} = -1V)	h_{FE}	 -80 -50 -20	 — — —	 — — —	 — — —
Base-Emitter On Voltage (I_C = -250mA, V_{CE} = -1V)	$V_{BE(on)}$	—	—	-1.2	V
Base-Emitter Saturation Voltage (I_C = -250mA, I_B = -10mA) (I_C = -250mA, I_B = -25mA)	$V_{BE(sat)}$	 — —	 — —	 -.5 -.35	Volts
dynamic characteristics					
Collector Capacitance (V_{CB} = -10V, I_E = 0, f = 1MHz)	C_{BO}	—	—	30	pF
Current-Gain Bandwidth Product (I_C = -200mA, V_{CE} = -5V, f = 100MHz)	f_T	50	—	—	MHz