



# NPN POWER TRANSISTORS

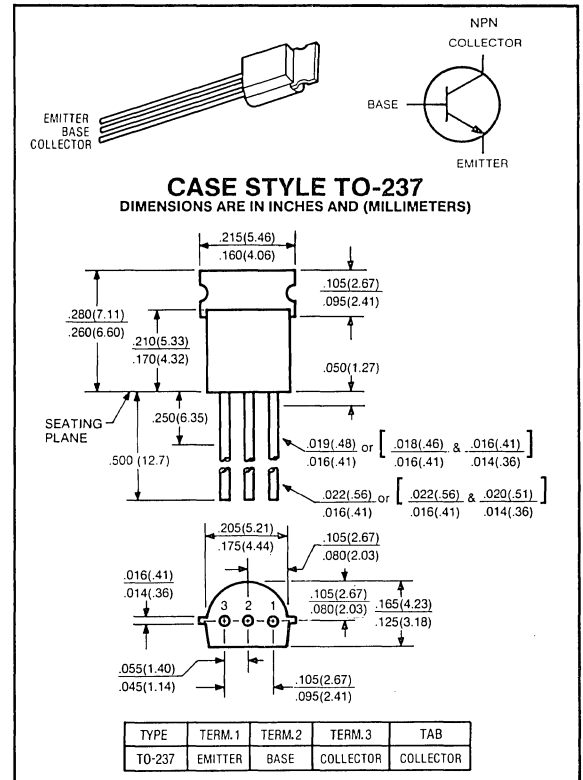
COMPLEMENTARY TO THE  
2N6726, 27/92GU51, 51A SERIES

**92GU01,01A**  
**2N6714,15**

30-40 VOLTS  
2 AMP, 1.2 WATTS

## Applications:

- Class "B" audio outputs/drivers
- General purpose switching and lamp drive in industrial and automotive circuits.



maximum ratings ( $T_A = 25^\circ\text{C}$ ) (unless otherwise specified)

RATING	SYMBOL	92GU01/2N6714	92GU01A/2N6715	UNITS
Collector-Emitter Voltage	$V_{CEO}$	30	40	Volts
Collector-Base Voltage	$V_{CB}$	40	50	Volts
Emitter Base Voltage	$V_{EB}$	5	5	Volts
Collector Current — Continuous	$I_C$	2.0	2.0	A
Total Power Dissipation @ $T_A = 25^\circ\text{C}$	$P_{DP}^*$	1.2	1.2	Watts
Operating and Storage Junction Temperature Range	$T_J, T_{STG}$	-55 to +150	-55 to +150	$^\circ\text{C}$

## thermal characteristics

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

\* $P_{DP}$  = 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.<sup>2</sup> minimum.

electrical characteristics ( $T_A = 25^\circ\text{C}$ ) (unless otherwise specified)

CHARACTERISTIC	SYMBOL	MIN	TYP	MAX	UNIT
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off characteristics

Collector-Emitter Sustaining Voltage ( $I_C = 10\text{mA}$ , $I_B = 0\text{A}$ )	92GU01,2N6714 92GU01A,2N6715	$V_{CEO(sus)}$	30 40	— —	— —	Volts
Collector Cut-off Current ( $V_{CB} = 40\text{V}$ , $I_E = 0$ ) ( $V_{CB} = 50\text{V}$ , $I_E = 0$ )	92GU01,2N6714 92GU01A,2N6715	$I_{CBO}$	—	—	0.1	$\mu\text{A}$
Emitter Cutoff Current ( $V_{EB} = 5\text{V}$ , $I_C = 0$ )		$I_{EBO}$	—	—	0.1	$\mu\text{A}$

on characteristics

DC Current Gain ( $I_C = 10\text{mA}$ , $V_{CE} = 1.0\text{V}$ ) ( $I_C = 100\text{mA}$ , $V_{CE} = 1.0\text{V}$ ) ( $I_C = 1000\text{mA}$ , $V_{CE} = 1.0\text{V}$ )		$h_{FE}$	55 60 50	— — —	— — —	—
Base-Emitter On Voltage ( $I_C = 1.0\text{A}$ , $V_{CE} = 1\text{V}$ )		$V_{BE(on)}$	—	—	1.2	V
Collector-Emitter Saturation Voltage ( $I_C = 1.0\text{A}$ , $I_B = 100\text{mA}$ )		$V_{CE(sat)}$	—	—	.5	Volts

dynamic characteristics

Collector Capacitance ( $V_{CB} = 10\text{V}$ , $I_E = 0$ , $f = 1\text{MHz}$ )		$C_{BO}$	—	—	30	pF
Current-Gain Bandwidth Product ( $I_C = 50\text{mA}$ , $V_{CE} = 10\text{V}$ , $f = 1\text{MHz}$ )		$f_T$	50	—	—	MHz