

Designed for general-purpose amplifier and low speed switching applications.

High DC Current Gain –

$$h_{FE} = 3500 \text{ (Typ) @ } I_C = 4.0 \text{ Adc}$$

Collector–Emitter Sustaining Voltage – @ 200 mAdc

$$V_{CEO(sus)} = 60 \text{ Vdc (Min) – 2N6667}$$

$$= 80 \text{ Vdc (Min) – 2N6668}$$

Low Collector–Emitter Saturation Voltage –

$$V_{CE(sat)} = 2.0 \text{ Vdc (Max) @ } I_C = 5.0 \text{ Adc}$$

Monolithic Construction with Built–In Base–Emitter Shunt Resistors

TO–220AB Compact Package

Complementary to 2N6387, 2N6388

These Devices are Pb–Free and are RoHS Compliant*

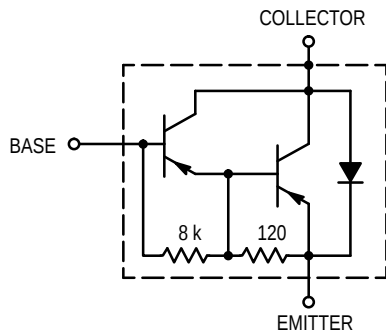
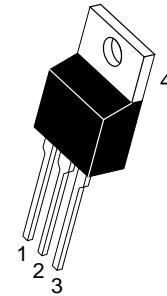


Figure 1. Darlington Schematic

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**PNP SILICON
DARLINGTON
POWER TRANSISTORS
10 A, 60–80 V, 65 W**



TO–220
CASE 221A
STYLE 1

MARKING DIAGRAM



- x = 7 or 8
- A = Assembly Location
- Y = Year
- WW = Work Week
- G = Pb–Free Package

ORDERING INFORMATION

Device	Package	Shipping
2N6667G	TO–220 (Pb–Free)	50 Units/Rail
2N6668G	TO–220 (Pb–Free)	50 Units/Rail

*For additional information on our Pb–Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.

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Symbol	2N6667	2N6668	Unit
V_{CEO}	60	80	Vdc
V_{CB}	60	80	Vdc
V_{EB}	5.0		Vdc
I_C	10 15		Adc
I_B	250		mAdc

2N6667, 2N6668

D₁, MUST BE FAST RECOVERY TYPES e.g.,

t_r, t_f ≤ 10 ns
DUTY CYCLE = 1.0%

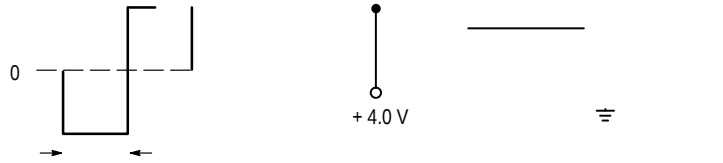


Figure 2. Switching Times Test Circuit

2N6667, 2N6668

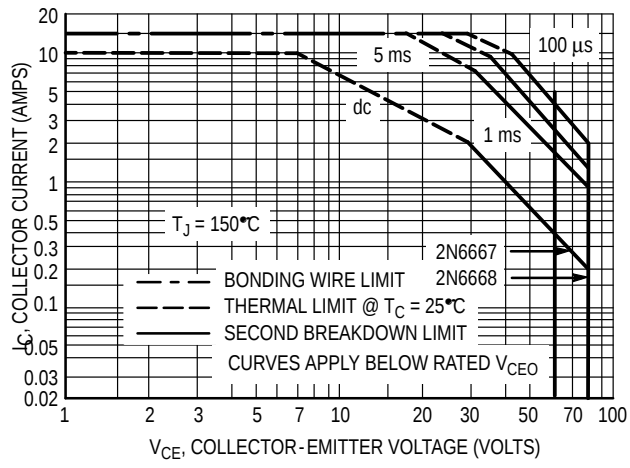


Figure 6. Maximum Safe Operating Area

2N6667, 2N6668

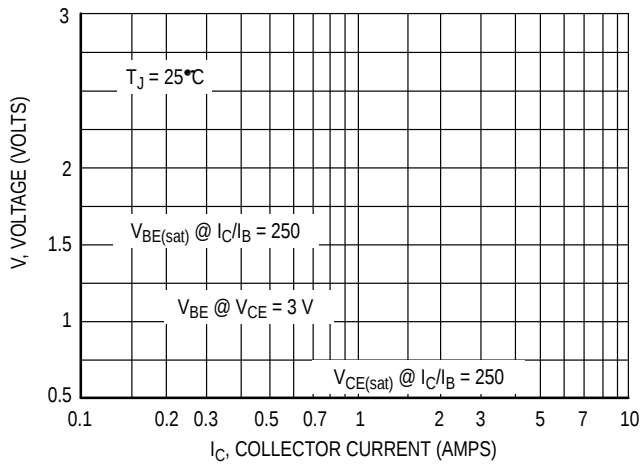


Figure 11. Typical "On" Voltages

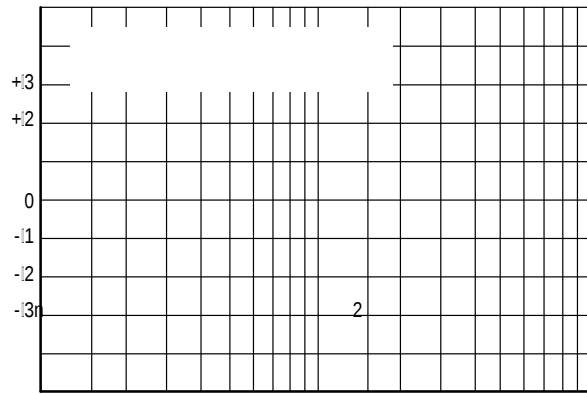


Figure 12. Typical Temperature Coefficients

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