

2ST3360K

Rad-Hard 60 V, 0.8 A, NPN and PNP transistors in single package



The new 2ST3360, specifically designed for Space and high reliability applications, offers best-in-class radiation hardness performance

Designed for aerospace applications, the 2ST3360K is dual complementary (NPN and PNP) bipolar transistor housed in a hermetic Flat-8 package.

Able to operate under critical environment and radiation exposure, it provides high reliability performance and immunity to the total ionizing dose (TID) at high and low dose rate conditions.

Both NPN and PNP transistors offer linear and complementary behavior and fast switching performance.

Specifically recommended for space and harsh environment applications, it is suitable for power MOSFET driver and high peak output current applications.

KEY FEATURES

- 100 krad (Si) low dose rate
- Temperature range: -65 °C to 200 °C
- Qualified according to ESCC 5207/009 specifications

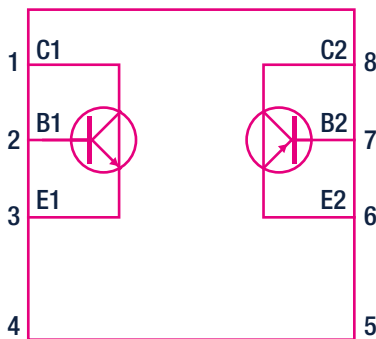
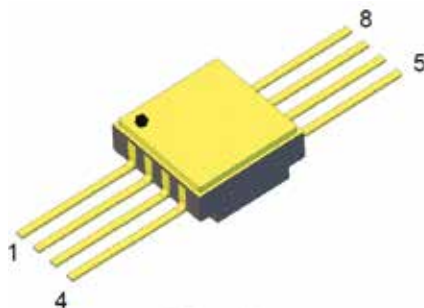
KEY BENEFITS

- Linear gain characteristics
- Matched pair
- High collector peak current (4 A)

KEY APPLICATIONS

- Space
 - Satellites
 - Probes
 - Spacecraft
 - Lander modules
 - Space observatories
 - Deep-space exploration
 - Launchers
- Hi-Rel Industrial
 - Avionics
 - Sub-marine
 - Oil-industry
 - Railways

Flat-8 package and schematic

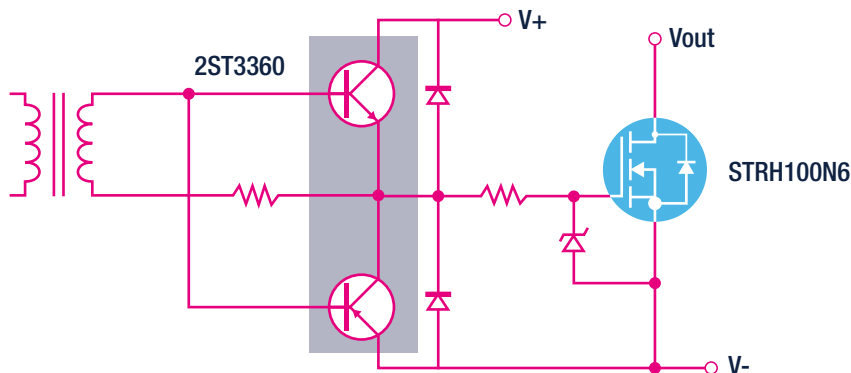


Flat-8

Pin 4 and pin 5 are connected together to the seal ring and lid

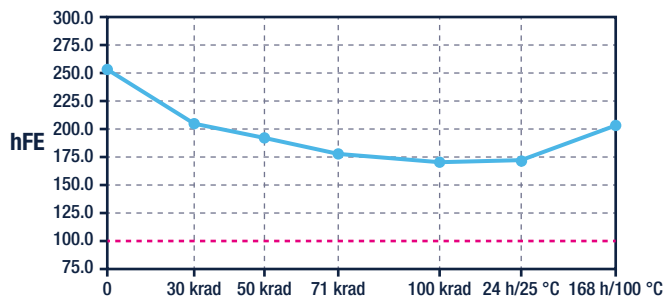
This device provides balanced switching performance and is suitable for driving high gate charges in high-current Power MOSFETs.

Simplified schematic of a power conversion topology

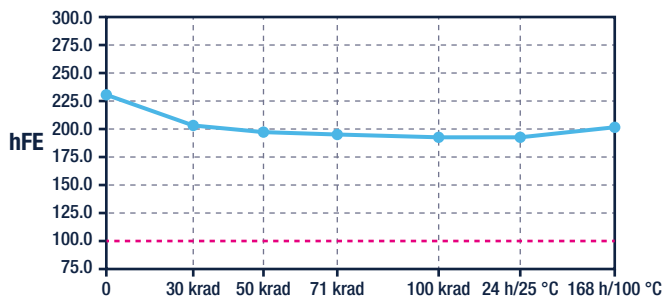


Thanks to its specific rad-hard design, it offers stable performance when exposed to radiation. The graphs below show the hFE behaviour vs. the total ionized dose up to 100 krad.

NPN (hFE @ Ta = 25 °C; Vce = 2 V; Ic = 100 mA)



PNP (hFE @ Ta = 25 °C; Vce = -2 V; Ic = -100 mA)



Ordering information

Part number	Agency specification	Quality level	Radiation level	Package	Mass	Lead finish	Marking
2ST3360K1	-	Engineering model	-	-	-	Gold	2ST3360K1
2ST3360RKG	5207/009/01R	ESCC flight	100 krad	Flat-8	0.4 g	Gold	520700901R
2ST3360RKT	5207/009/02R	ESCC flight	100 krad	-	-	Solder dip	520700902R



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