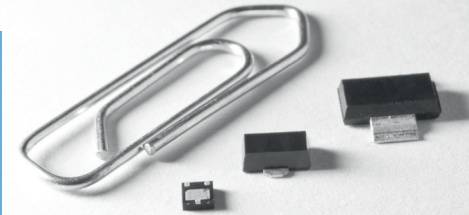


# Medium power general purpose transistors



## NPN medium power general purpose transistors

Package						SOT223 (SC-73)	SOT89 (SC-62)	DFN2020-3 (SOT1061)
Size (mm)						6.5 x 3.5 x 1.65	4.5 x 2.5 x 1.5	2.0 x 2.0 x 0.65
P <sub>tot</sub> (mW)						1350	1350	1100
Polarity	V <sub>CEO</sub> (V)	I <sub>C</sub> (mA)	h <sub>FE</sub> min	h <sub>FE</sub> max	f <sub>T</sub> min (MHz)			
NPN	20	1000	85 - 160	375	40	BCP68 / -25	BC868 / -25	BC68PA / BC68-25PA
	45	1000	63 - 100	160 - 250	100	BCP54 / -10 / -16	BCX54 / -10 / -16	BC54PA / BC54-10PA / BC54-16PA
	60	1000	63 - 100	160 - 250	100	BCP55 / -10 / -16	BCX55 / -10 / -16	BC55PA / BC55-10PA / BC55-16PA
			100	300	100	BSP41	BSR41	
	80	1000	63 - 100	160 - 250	100	BCP56 / -10 / -16	BCX56 / -10 / -16	BC56PA / BC56-10PA / BC56-16PA
40 - 100			120 - 300	100	BSP43	BSR42 / 43		

## PNP medium power general purpose transistors

PNP	20	1000	85 - 160	250 - 375	40	BCP69 / -16 / -25	BC869 / -16 / -25	BC69PA / BC69-16PA / BC69-25PA
	45	1000	63 - 100	160 - 250	115 <sup>1)</sup> - 145 <sup>1)</sup>	BCP51 / -10 / -16	BCX51 / -10 / -16	BC51PA / BC51-10PA / BC51-16PA
	60	1000	63 - 100	160 - 250	100	BCP52 / -10 / -16	BCX52 / -10 / -16	BC52PA / BC52-10PA / BC52-16PA
			40 - 100	120 - 300	100	BSP31	BSR30 / 31	
	80	1000	63 - 100	160 - 250	115 <sup>1)</sup> - 145 <sup>1)</sup>	BCP53 / -10 / -16	BCX53 / -10 / -16	BC53PA / BC53-10PA / BC53-16PA
40 - 100			120 - 300	100	BSP32 / 33	BSR33		

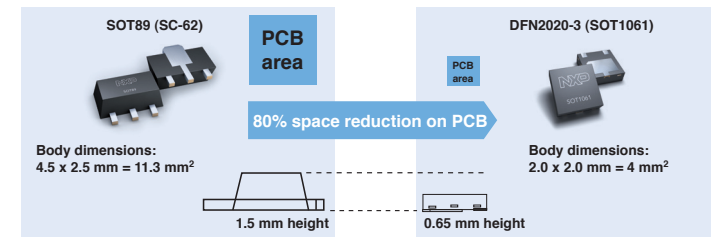
<sup>1)</sup> typical value

### Key features

- ▶ Three medium power SMD packages
- ▶ Leadless very small SMD plastic package with medium power capability in DFN2020-3 (SOT1061) package
- ▶ Exposed heat sink for excellent thermal and electrical performance in DFN2020-3 (SOT1061) and SOT89
- ▶ V<sub>CEO</sub> ranging from 20 V to 80 V
- ▶ High collector current capability I<sub>C</sub> (up to 2 A) and I<sub>CM</sub> (up to 3 A)
- ▶ AEC-Q101 qualified

### Key benefits

- ▶ Ideally suited for medium power applications
- ▶ High power dissipation capability
- ▶ High energy efficiency due to less heat generation
- ▶ Excellent electrical performance on a small footprint 2 x 2 mm (DFN2020-3)
- ▶ 80% board space reduction (DFN2020-3 vs. SOT89)



# Minimized outline drawings and reflow soldering footprint

