



New Small Signal OptiMOS™ 606 Family

Infineon has launched a new 60V small signal OptiMOS™ product family in TSOP-6, SC59 and SOT-89 packages.

These new best-in-class 60mΩ products are designed as external FETs for low power DC/DC converters. The low Q_g and the low power dissipation make the 606 family ideal as external FETs for various Driver ICs with 4.5 output voltage.

All products are qualified to AEC Q101, making them suitable for automotive platforms – for applications such as cell balancing in battery energy control modules for Electric Vehicles, Hybrid Vehicles and Plug-in Hybrids – and all applications demanding the highest levels of quality.

Product Portfolio



	Package	V_{DS} [V]	$R_{DS(on)}$ [mΩ] ($V_{GS}=10V$)	$R_{DS(on)}$ [mΩ] ($V_{GS}=4.5$)	$I_{D(max)}$ [A]	$V_{GS(th)}$ [V]	$Q_{G(max)}$ [nC]
BSS606N	SOT-89	60	60	90	3.2	1.3...2.3	5.6
BSL606SN	TSOP-6	60	60	95	4.5		
BSR606N	SC59	60	60	90	2.3		

Features

- Best-in-class $R_{DS(on)}$ for given footprint
- Logic level-rated low Q_g
- SC59 footprint compatible with SOT-23
- Qualified according to AEC Q101
- RoHS compliant and Halogen Free




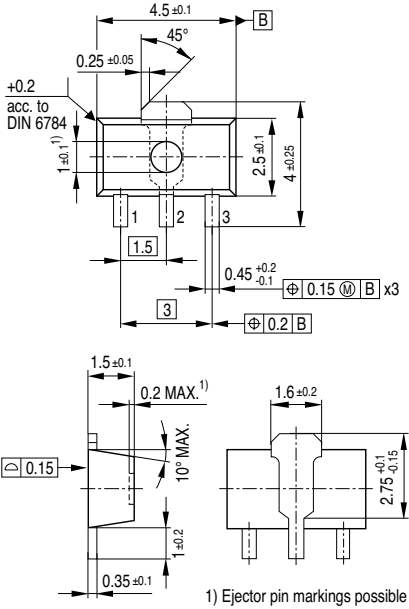
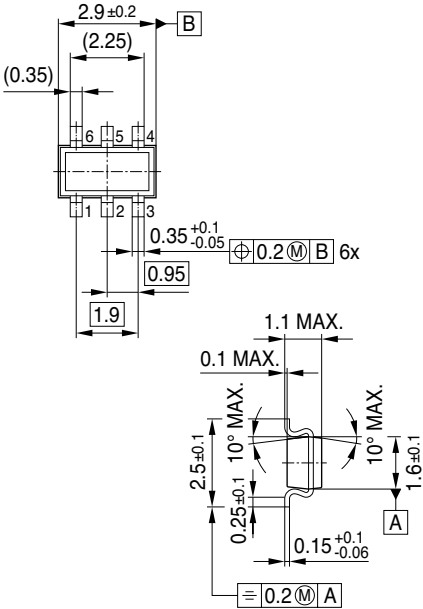
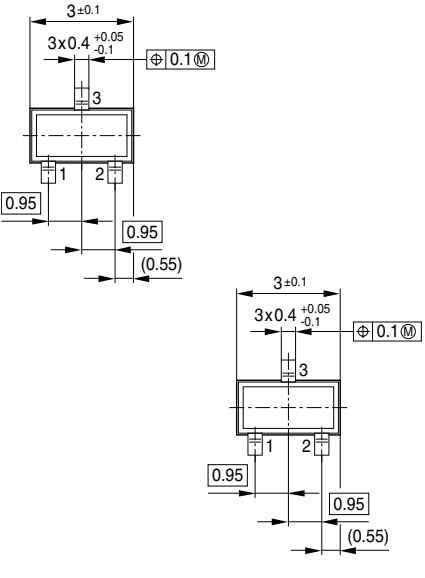
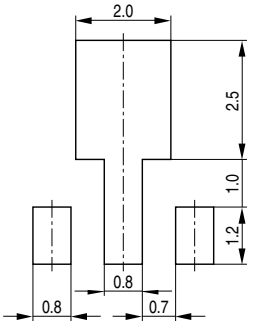
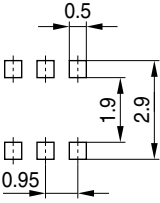
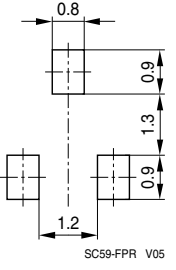
Benefits

- Low power dissipation
- Fast switching
- Improved efficiency at low loads due to low Q_g
- Suitable for automotive and high quality demanding applications
- Suitable for 4.5V MCU output voltage
- Space saving packages
- Easy to design-in

Applications

- External FET for low-power DC/DC converters
- Cell balancing in Battery Energy Control Modules (BECM) for Electric Vehicles (EV), Hybrid Vehicles (HEV) and Plug-in Hybrids (PHEV)
- External FET for various Driver ICs

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SOT-89	TSOP-6	SC59
		
<p align="center">Package Outline</p>	<p align="center">Package Outline</p>	<p align="center">Package Outline</p>
		
<p align="center">Foot Print</p>	<p align="center">Foot Print</p>	<p align="center">Foot Print</p>
	 <p align="center">Remark: Wave soldering possible dep. on customers process conditions</p>	

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