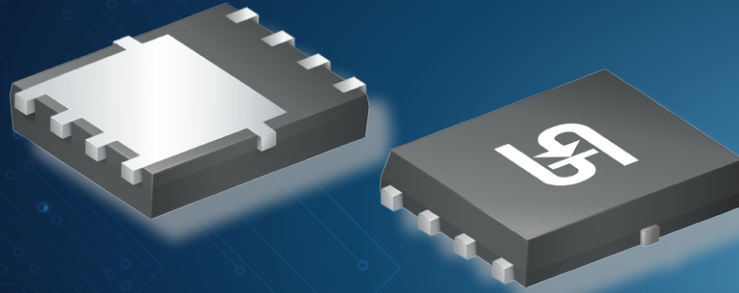


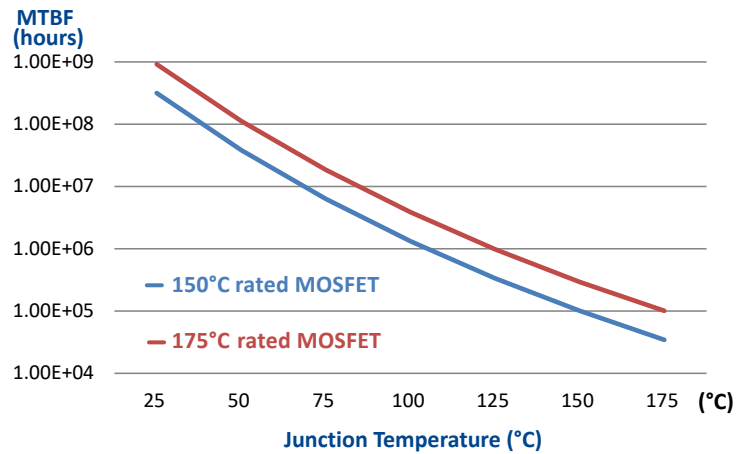
# TSC launches new 40V and 60V N-Ch MOSFETs rated to 175°C T<sub>J</sub>, suitable for high ambient temperature applications



Taiwan Semiconductor introduces new 40V and 60V N-Ch MOSFET families. Featured with T<sub>J</sub> rated to 175°C, logic or standard gate threshold voltage levels, and a wide range of R<sub>DS(on)</sub> levels for flexible and robust power switching designs. Q<sub>gd</sub>/Q<sub>gs</sub> and Q<sub>r</sub> parameters have been optimized to improve figure of merit and reduce EMI. The MOSFETs are packaged in a small form factor PDFN56 package for improved power density in application.

## Features

- 175°C operating junction temperature
- High thermal design margin
- Higher surge current capability during cold load start-up and in rush
- Suited for high temperature environment applications



Part number	Package	T <sub>J</sub> (°C)	V <sub>DS</sub> (V)	R <sub>DS</sub> 10V (mΩ) max.	R <sub>DS</sub> 4.5V (mΩ) max.	Q <sub>g</sub> 10V (nC_typ.)	Q <sub>g</sub> 4.5V (nC_typ.)	Q <sub>gs</sub> (nC_typ.)	Q <sub>gd</sub> (nC_typ.)	MP Schedule
<a href="#">TSM025NB04LCR</a>	PDFN56	175	40	2.5	3.2	112	57	18	27	MP
<a href="#">TSM033NB04LCR</a>	PDFN56	175	40	3.3	4	79	40	12	19	MP
<a href="#">TSM070NB04LCR</a>	PDFN56	175	40	7	9.5	39	20	6	11	MP
<a href="#">TSM110NB04LCR</a>	PDFN56	175	40	11	16	23	12	4	6	MP
<a href="#">TSM150NB04LCR</a>	PDFN56	175	40	15	19	18	9	3	5	MP
<a href="#">TSM025NB04CR</a>	PDFN56	175	40	2.5	N/A	113	N/A	32	26	MP
<a href="#">TSM033NB04CR</a>	PDFN56	175	40	3.3	N/A	77	N/A	23	19	MP
<a href="#">TSM070NB04CR</a>	PDFN56	175	40	7	N/A	40	N/A	12	10	MP
<a href="#">TSM110NB04CR</a>	PDFN56	175	40	11	N/A	23	N/A	7	6	MP
<a href="#">TSM150NB04CR</a>	PDFN56	175	40	15	N/A	19	N/A	6	4	MP
<a href="#">TSM048NB06LCR</a>	PDFN56	175	60	4.8	6.8	105	52	17	23	MP
<a href="#">TSM130NB06LCR</a>	PDFN56	175	60	13	18	37	18	7	9	MP
<a href="#">TSM220NB06LCR</a>	PDFN56	175	60	22	28	23	12	4	5	MP
<a href="#">TSM280NB06LCR</a>	PDFN56	175	60	28	39	18	9	3	4	MP
<a href="#">TSM045NB06CR</a>	PDFN56	175	60	5	N/A	104	N/A	30	24	MP
<a href="#">TSM130NB06CR</a>	PDFN56	175	60	13	N/A	36	N/A	12	8	MP
<a href="#">TSM220NB06CR</a>	PDFN56	175	60	22	N/A	23	N/A	6.5	5.4	MP
<a href="#">TSM300NB06CR</a>	PDFN56	175	60	30	N/A	18	N/A	6	4	MP

For pricing and more information, please contact TSC sales or authorized distributors.