

TOSHIBA Field Effect Transistor Silicon N Channel MOS Type (U-MOS III)

SSM3K15AFU

Load Switching Applications

- 2.5 V drive
- Low ON-resistance: $R_{DS(ON)} = 3.6 \Omega$ (max) (@ $V_{GS} = 4 V$)
 $R_{DS(ON)} = 6.0 \Omega$ (max) (@ $V_{GS} = 2.5 V$)

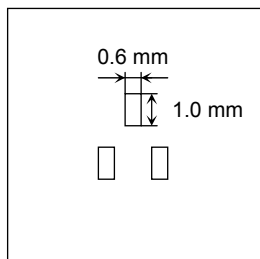
Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Drain-Source voltage	V_{DSS}	30	V
Gate-Source voltage	V_{GSS}	± 20	V
Drain current	DC	I_D	100
	Pulse	I_{DP}	400
Power dissipation	P_D (Note 1)	150	mW
Channel temperature	T_{ch}	150	°C
Storage temperature range	T_{stg}	-55 to 150	°C

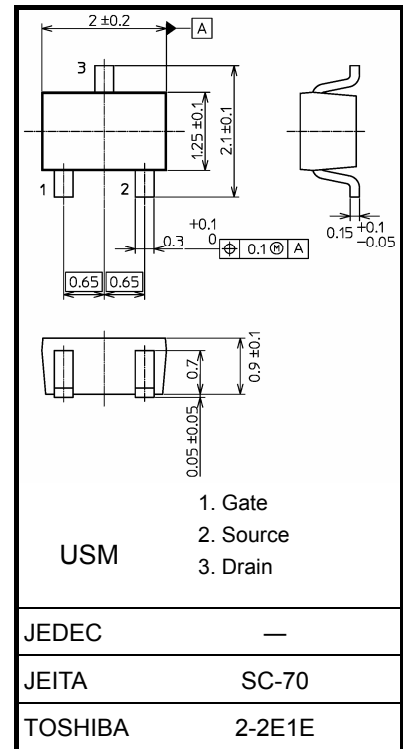
Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

Note 1: Mounted on FR4 board (25.4 mm × 25.4 mm × 1.6mm, Cu Pad : 0.6mm² × 3)

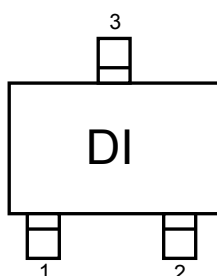


Unit: mm

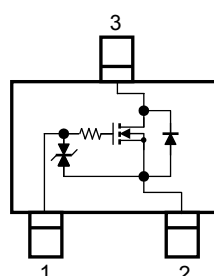


Weight: 6.0 mg (typ.)

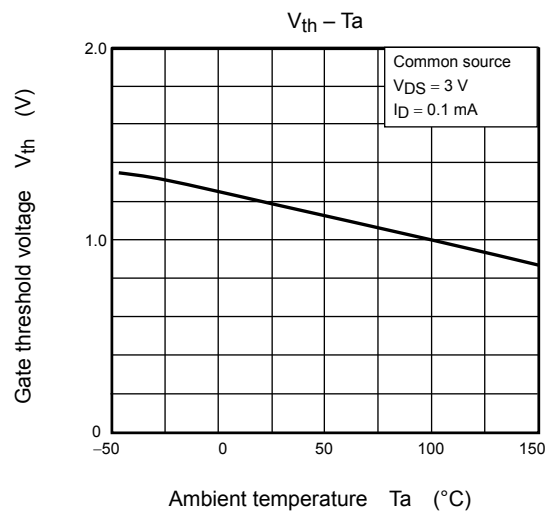
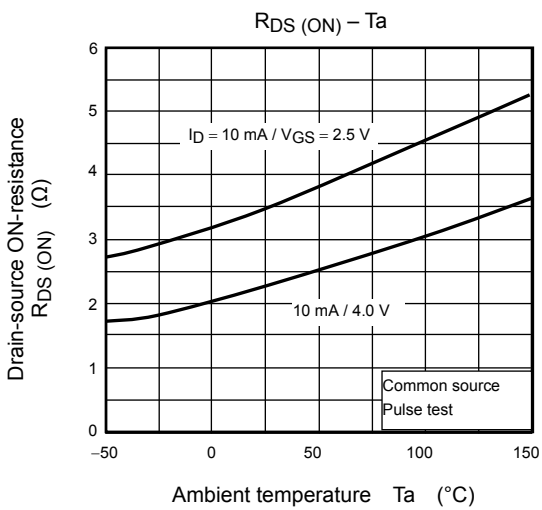
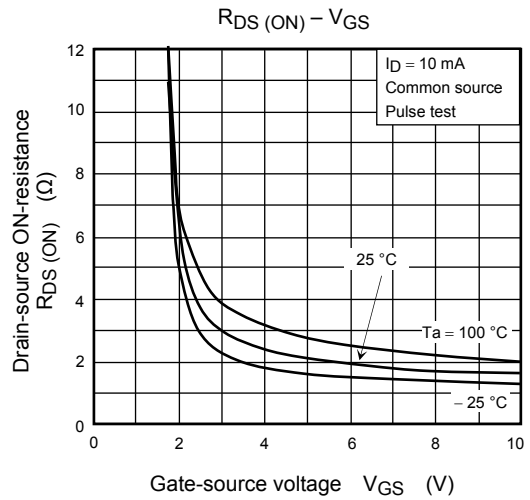
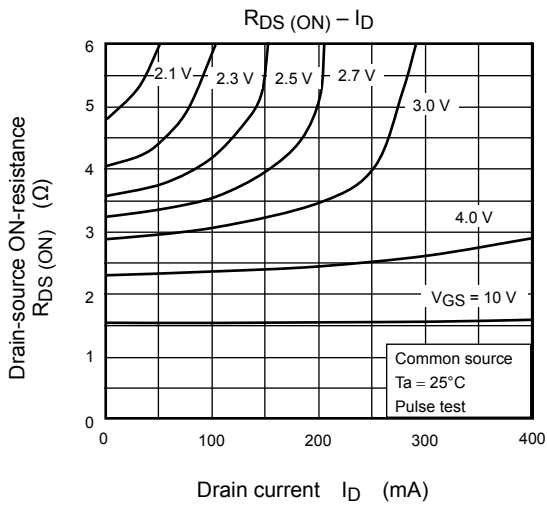
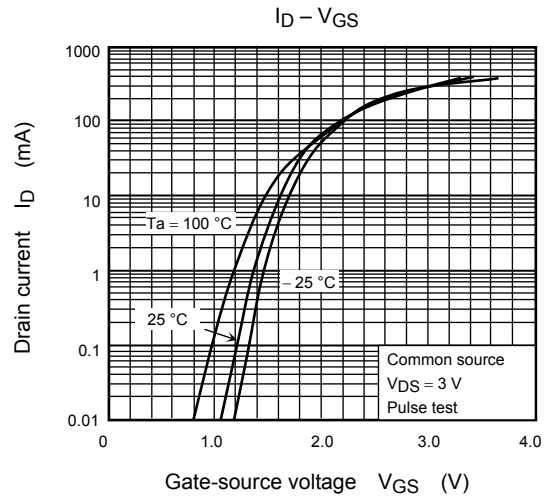
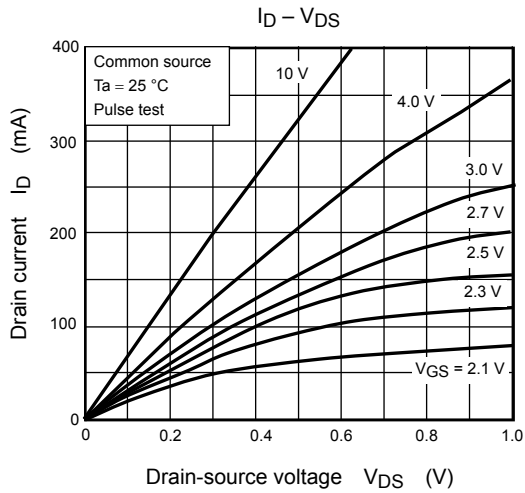
Marking

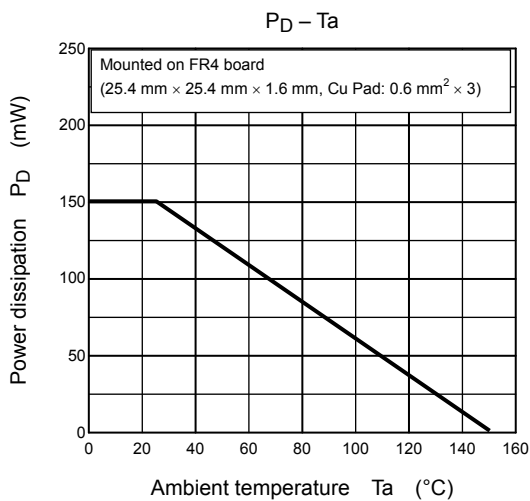
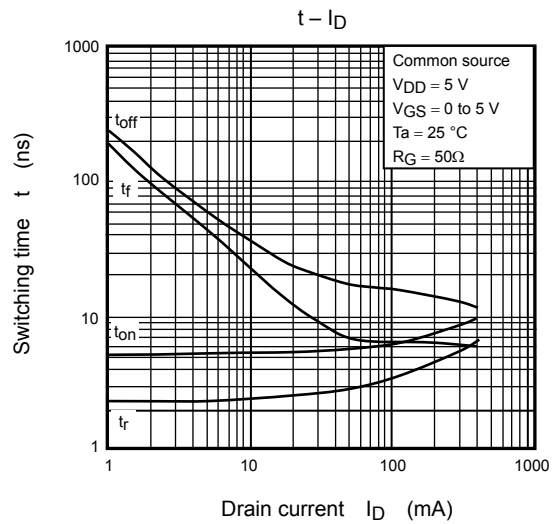
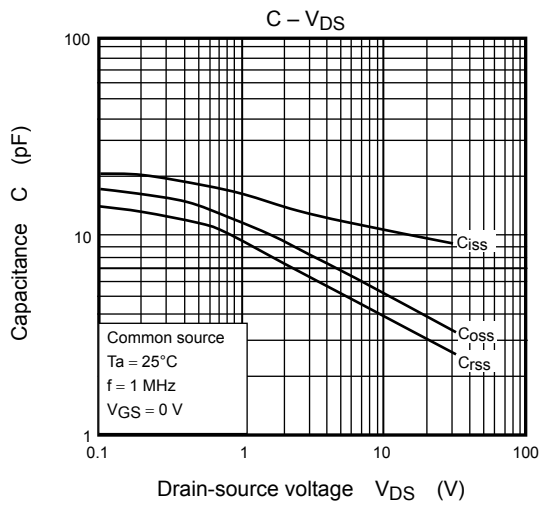
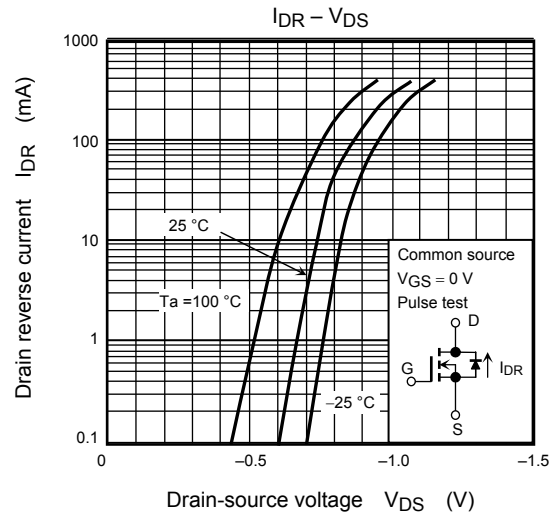
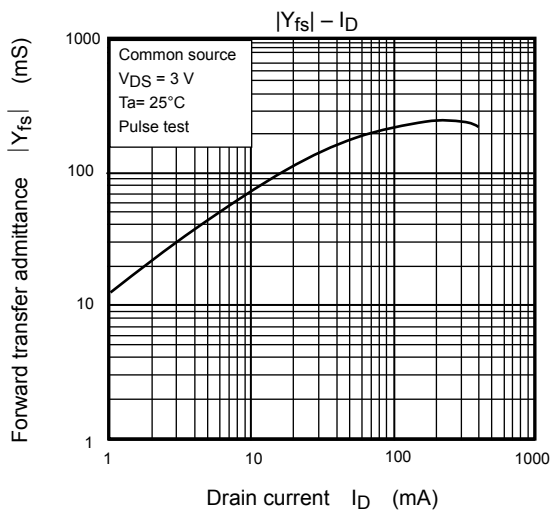


Equivalent Circuit (top view)



Start of commercial production
2012-08





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