

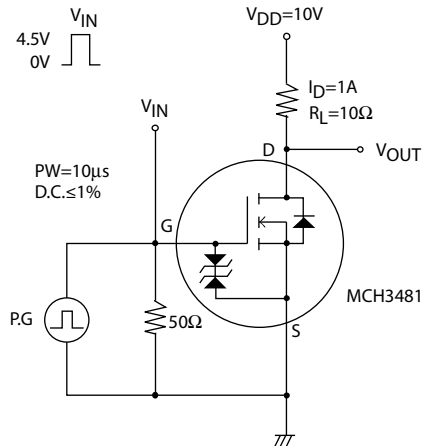
MCH3481

ELECTRICAL CHARACTERISTICS at Ta = 25°C (Note 2)

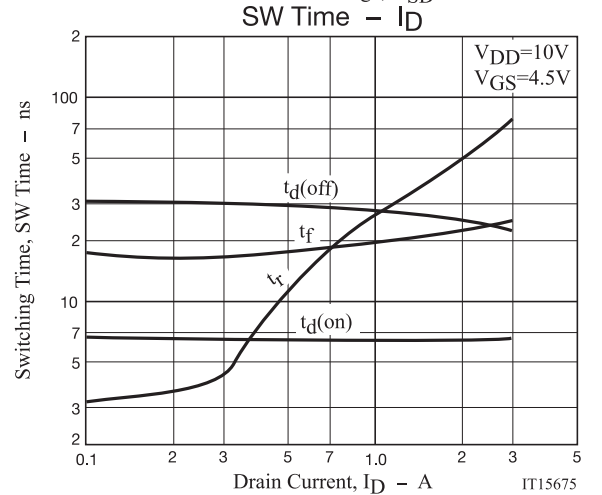
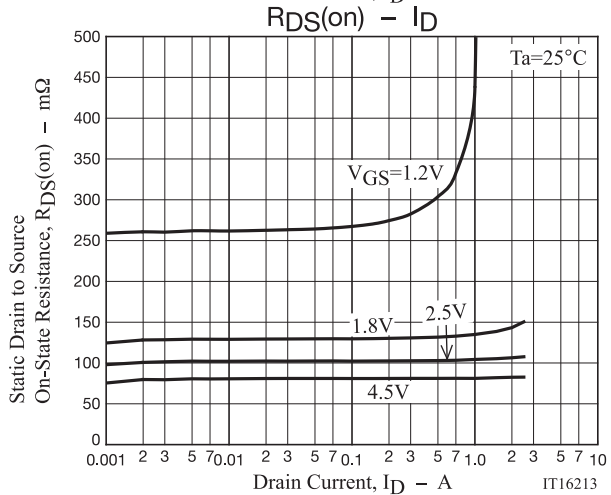
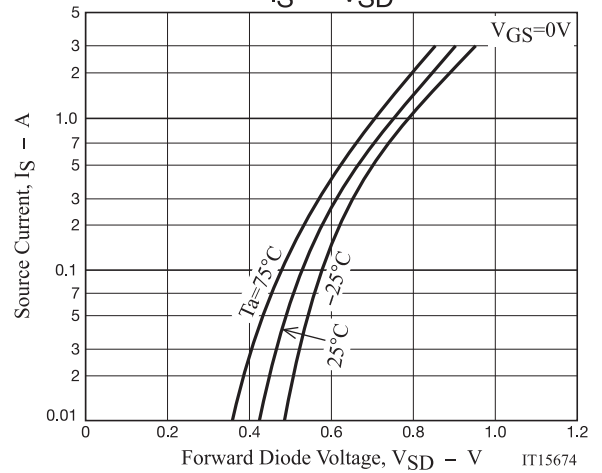
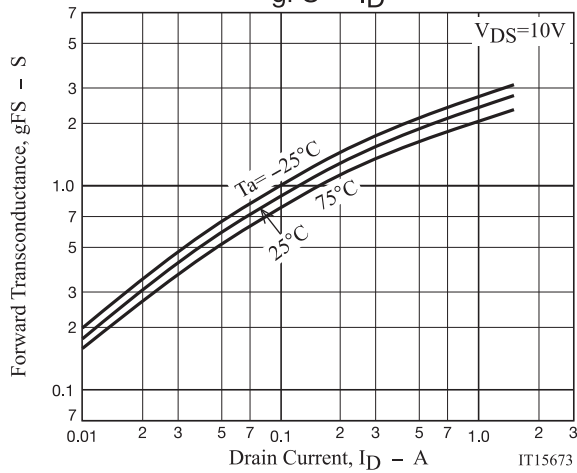
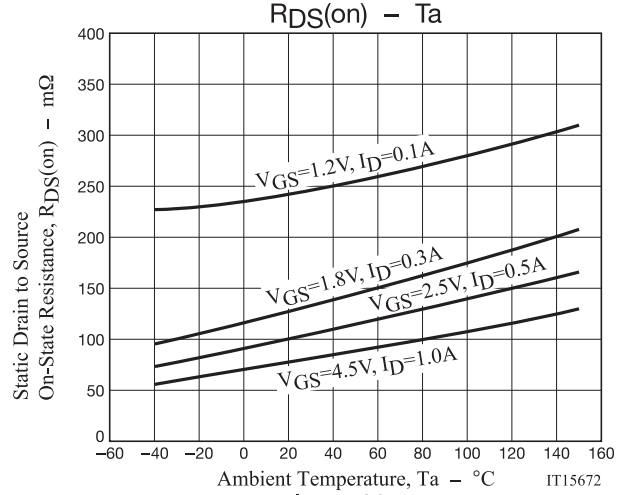
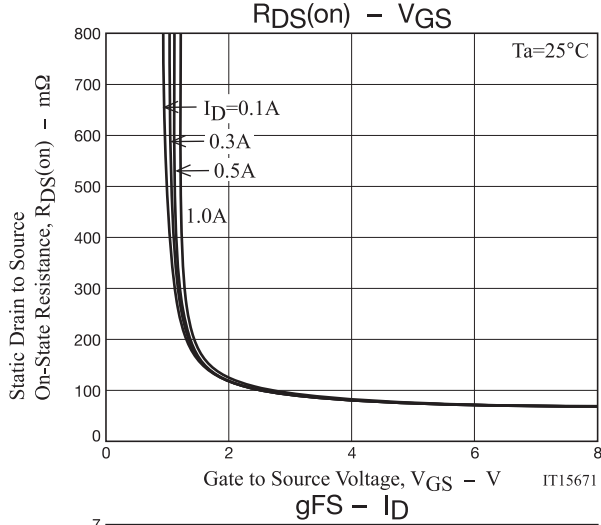
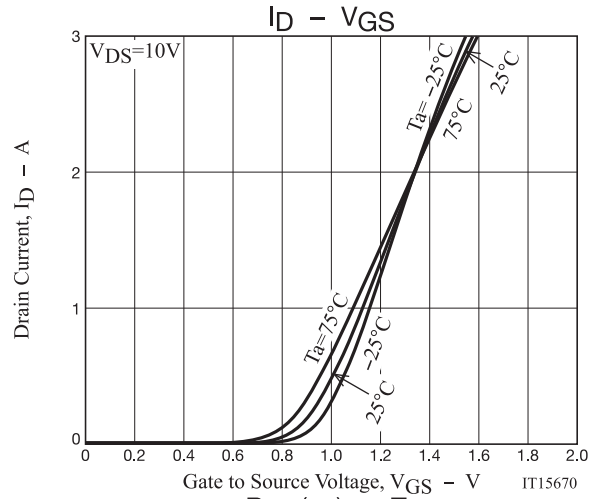
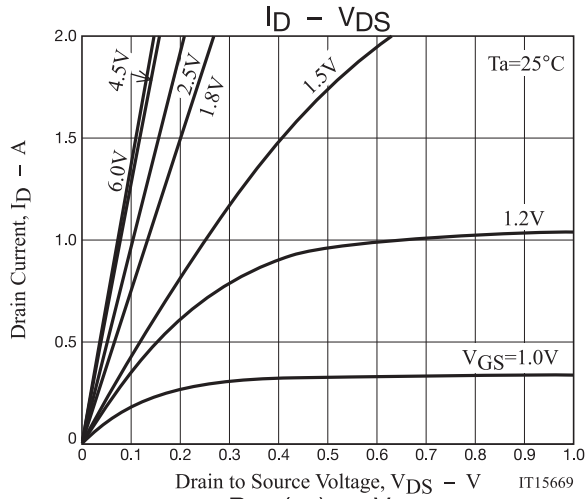
Parameter	Symbol	Conditions	Value			Unit
			min	typ	max	
Drain to Source Breakdown Voltage	V(BR)DSS	ID=1mA, VGS=0V	20			V
Zero-Gate Voltage Drain Current	IDSS	VDS=20V, VGS=0V			1	μA
Gate to Source Leakage Current	IGSS	VGS=±7.2V, VDS=0V			±10	μA
Gate Threshold Voltage	VGS(th)	VDS=10V, ID=1mA	0.3		0.9	V
Forward Transconductance	gFS	VDS=10V, ID=1A		2.4		S
Static Drain to Source On-State Resistance	RDS(on)1	ID=1A, VGS=4.5V		80	104	mΩ
	RDS(on)2	ID=0.5A, VGS=2.5V		105	147	mΩ
	RDS(on)3	ID=0.3A, VGS=1.8V		135	203	mΩ
	RDS(on)4	ID=0.1A, VGS=1.2V		270	540	mΩ
Input Capacitance	Ciss	VDS=10V, f=1MHz		175		pF
Output Capacitance	Coss			30		pF
Reverse Transfer Capacitance	Crss			25		pF
Turn-ON Delay Time	tD(on)	See specified Test Circuit		6.6		ns
Rise Time	tR			27		ns
Turn-OFF Delay Time	tD(off)			28		ns
Fall Time	tF			19		ns
Total Gate Charge	Qg	VDS=10V, VGS=4.5V, ID=2A		2.9		nC
Gate to Source Charge	Qgs			0.46		nC
Gate to Drain "Miller" Charge	Qgd			0.53		nC
Forward Diode Voltage	VSD	IS=2A, VGS=0V		0.85	1.2	V

Note 2 : Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

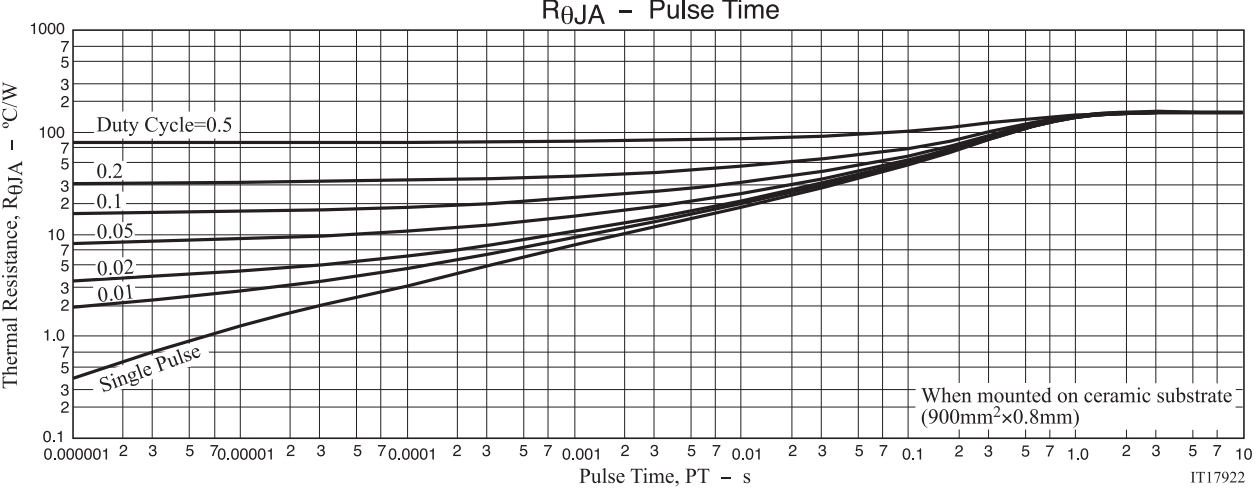
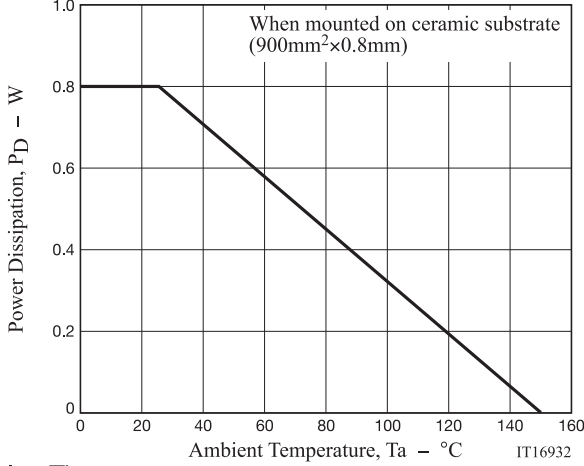
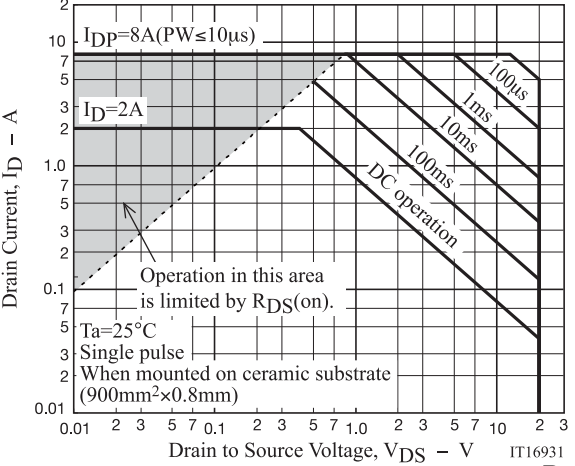
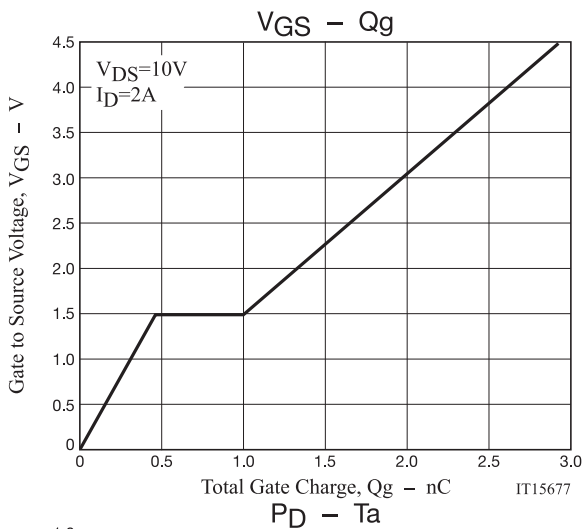
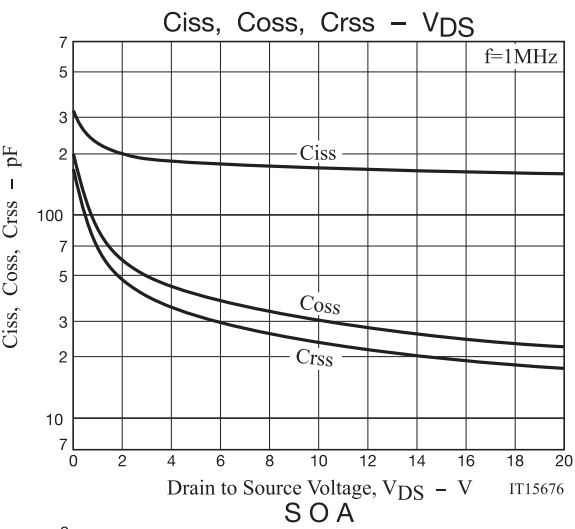
Switching Time Test Circuit



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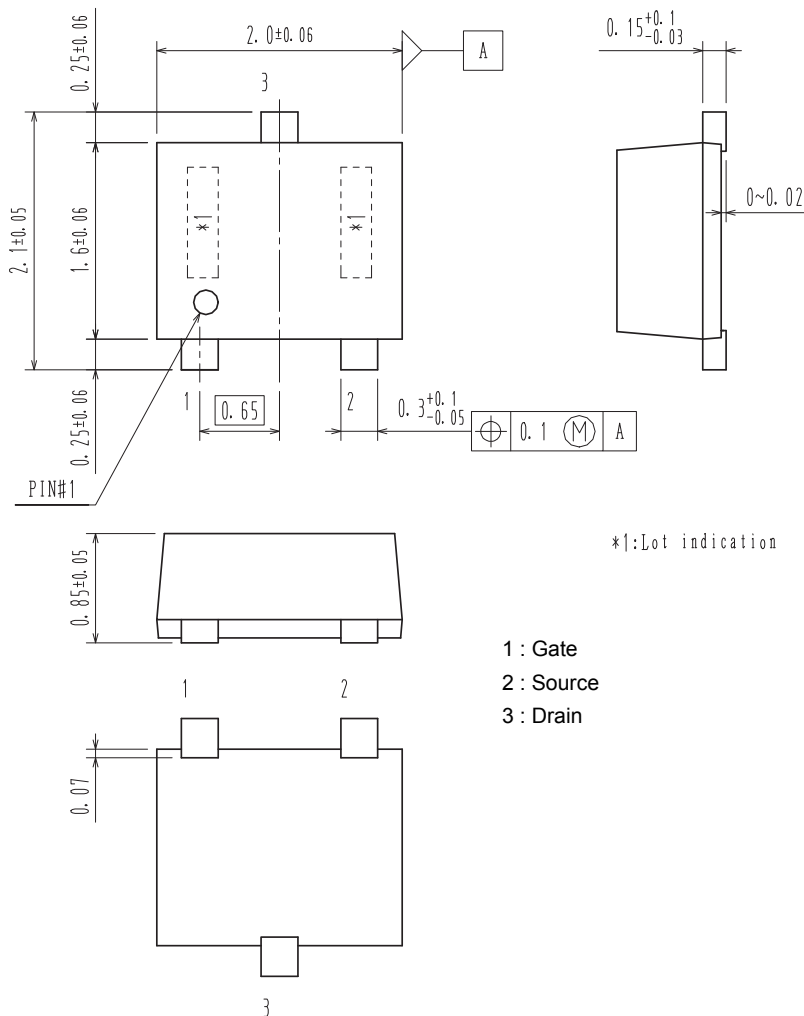


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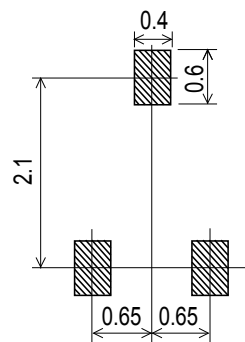
PACKAGE DIMENSIONS

unit : mm

SC-70FL / MCPH3
CASE 419AQ
ISSUE O



Recommended Soldering Footprint



ORDERING INFORMATION

Device	Marking	Package	Shipping (Qty / Packing)
MCH3481-TL-H	FN	SC-70FL / MCPH3 (Pb-Free / Halogen Free)	3,000 / Tape & Reel
MCH3481-TL-W			

† For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D. http://www.onsemi.com/pub_link/Collateral/BRD8011-D.PDF

Note on usage : Since the MCH3481 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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