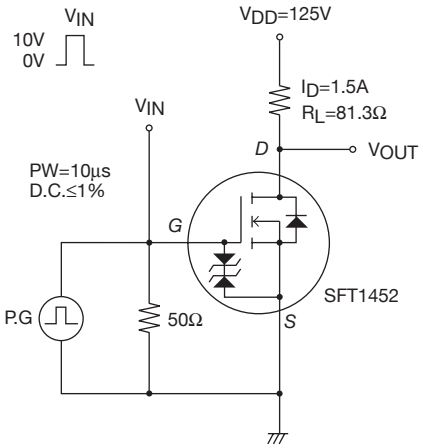
Electrical Characteristics at Ta=25°C

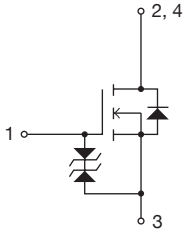
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	$V_{(BR)DSS}$	I_D=1mA, V_{GS}=0V	250			V
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=250V, V_{GS}=0V			1	μA
Gate-to-Source Leakage Current	I_{GSS}	V_{GS}=±24V, V_{DS}=0V			±10	μA
Gate Threshold Voltage	$V_{GS}(th)$	V_{DS}=10V, I_D=1mA	2.5		4.5	V
Forward Transconductance	g_{FS}	V_{DS}=10V, I_D=1.5A		1.7		S
Static Drain-to-Source On-State Resistance	$R_{DS}(on)$	I_D=1.5A, V_{GS}=10V		1.8	2.4	Ω
Input Capacitance	Ciss	V_{DS}=20V, f=1MHz		210		pF
Output Capacitance	Coss			20		pF
Reverse Transfer Capacitance	Crss			7		pF
Turn-ON Delay Time	$t_d(on)$	See specified Test Circuit.		8		ns
Rise Time	t_r			9		ns
Turn-OFF Delay Time	$t_d(off)$			13		ns
Fall Time	t_f			14		ns
Total Gate Charge	Qg	V_{DS}=125V, V_{GS}=10V, I_D=3A		4.2		nC
Gate-to-Source Charge	Qgs			1.4		nC
Gate-to-Drain “Miller” Charge	Qgd			1.0		nC
Forward Diode Voltage	V_{SD}	I_S=3A, V_{GS}=0V		0.95	1.2	V

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



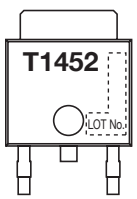
Electrical Connection



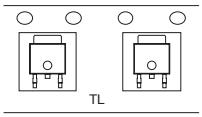
Ordering & Package Information

Device	Package	Shipping	memo
SFT1452-H	IPAK(TP)	500pcs./bag	Pb-Free and Halogen Free
SFT1452-W	SC-64, TO-251		
SFT1452-TL-H	DAPK(TP-FA)	700pcs./reel	
SFT1452-TL-W	SC-63, TO-252		

Marking



Packing Type:TL



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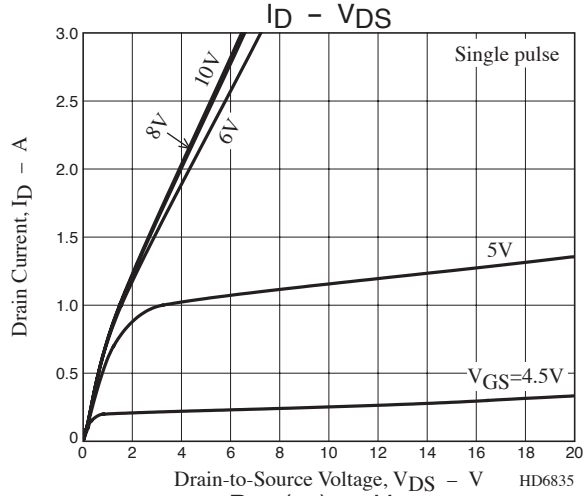

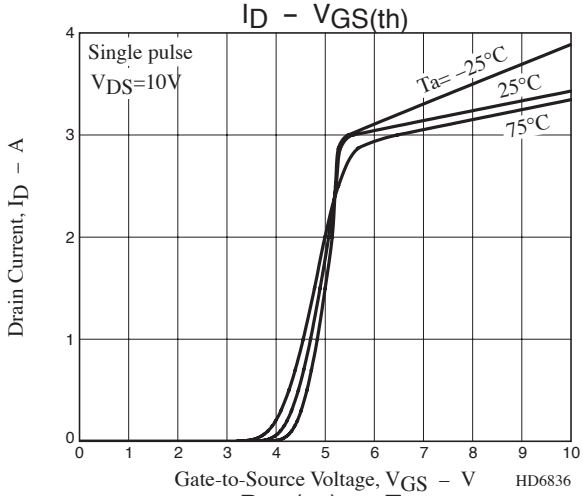

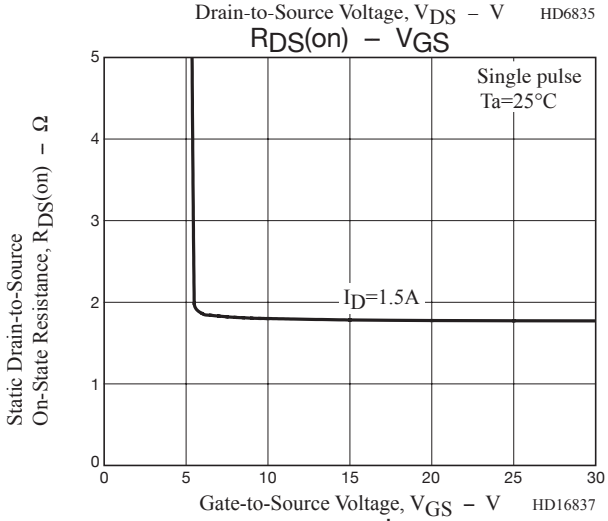

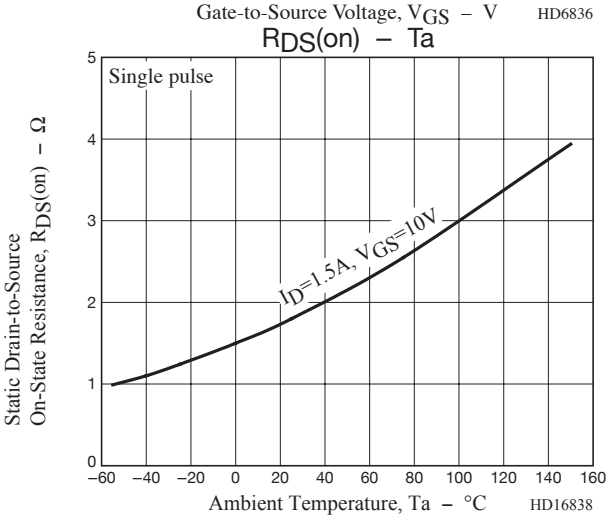

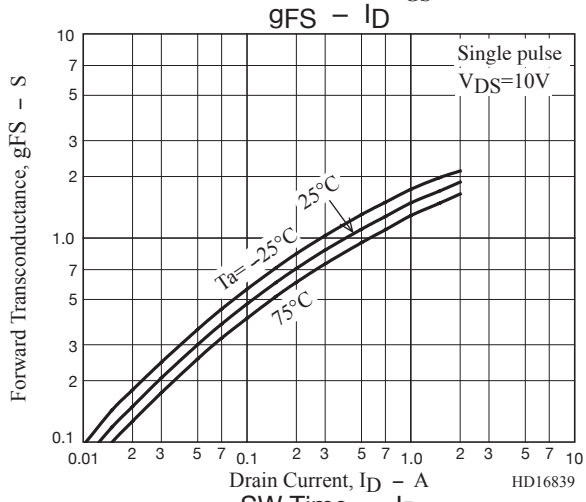

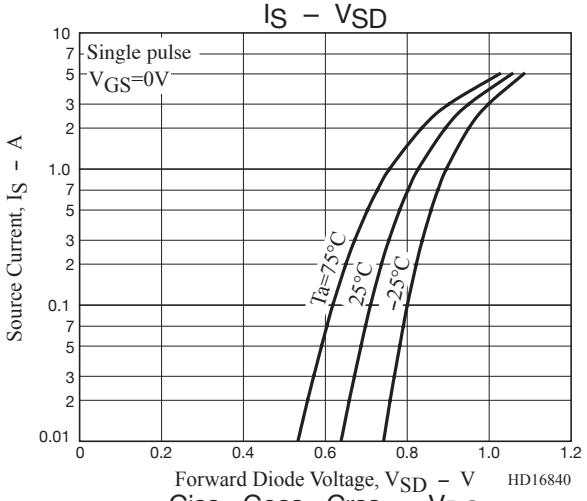

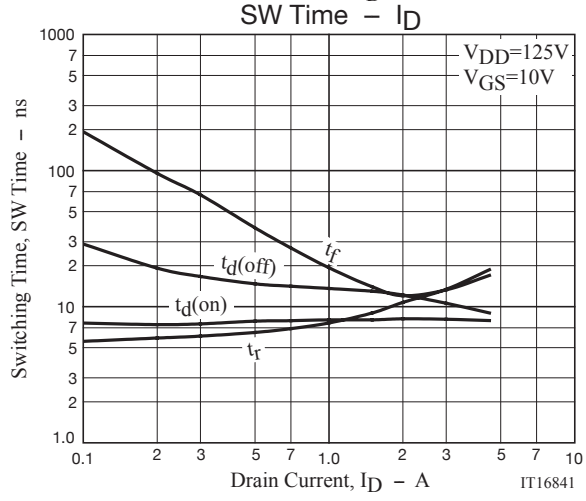

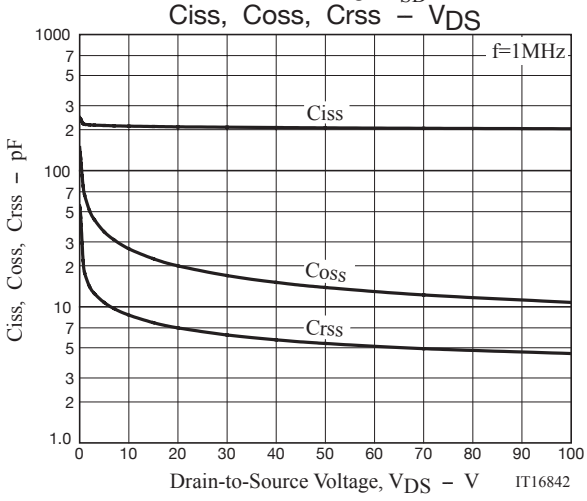

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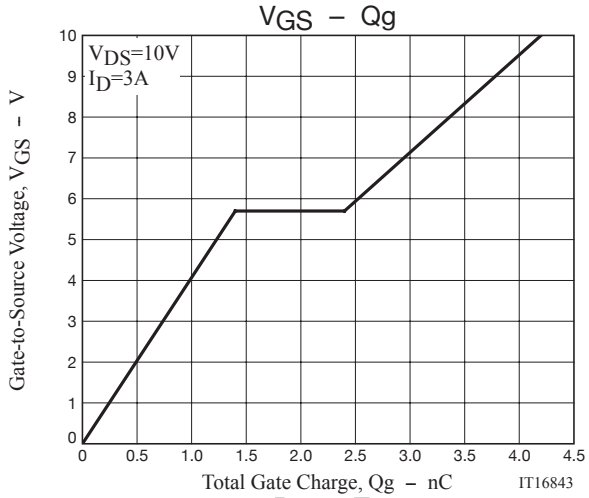

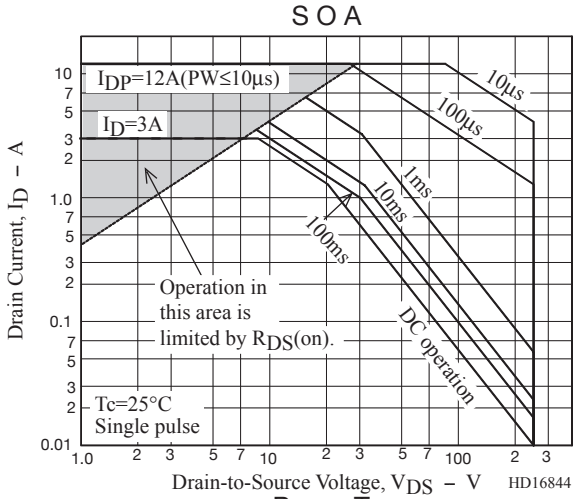

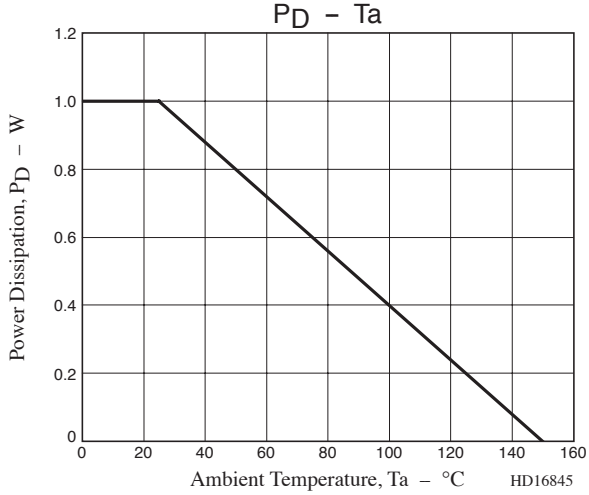

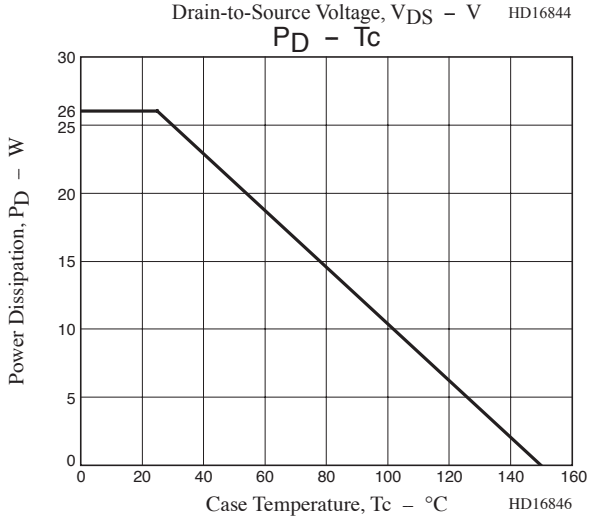

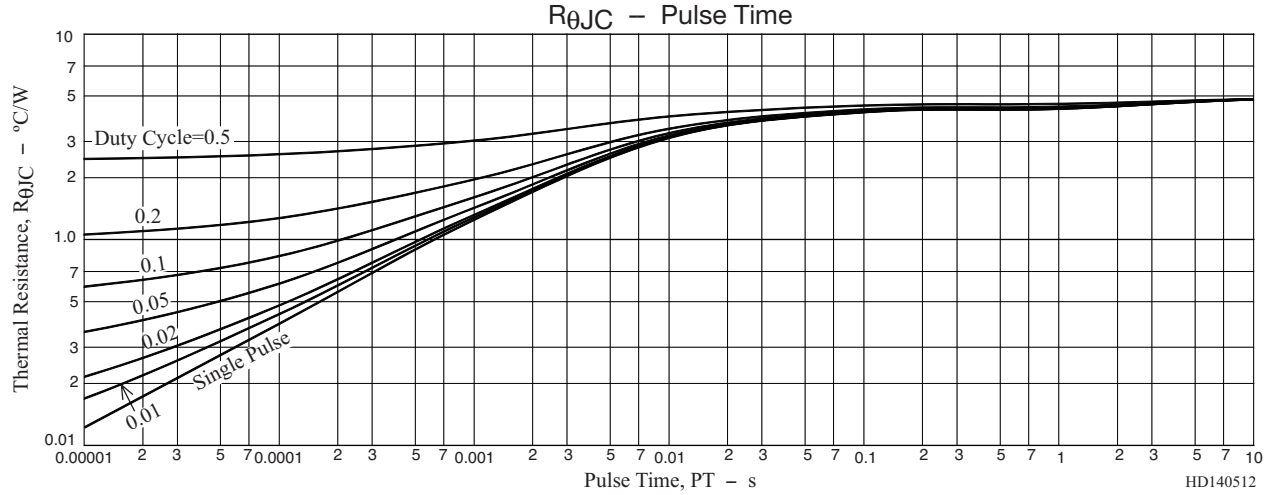

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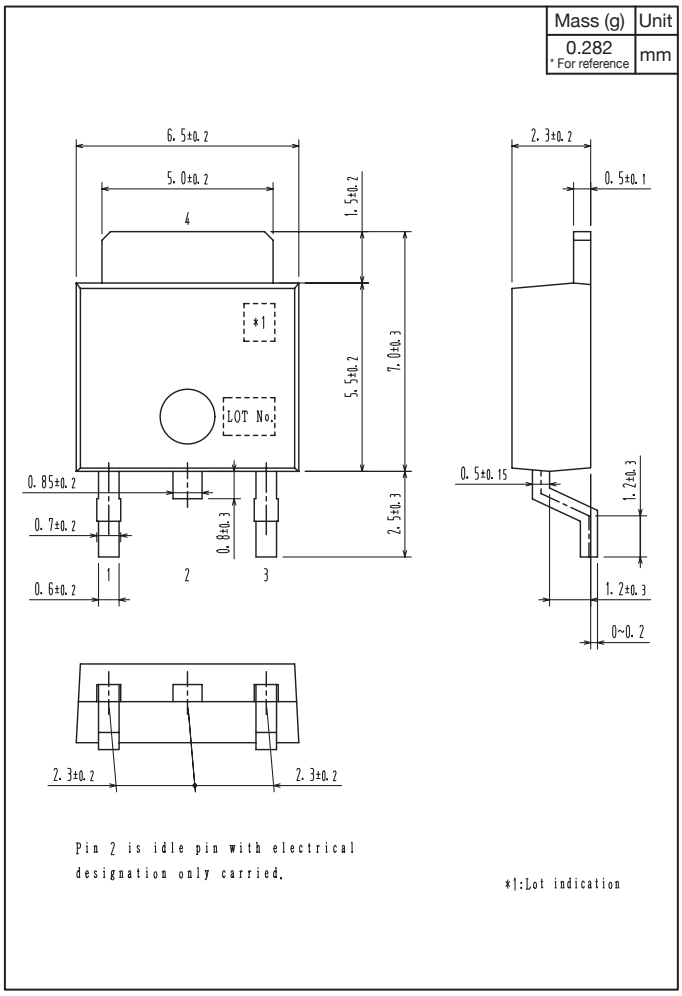
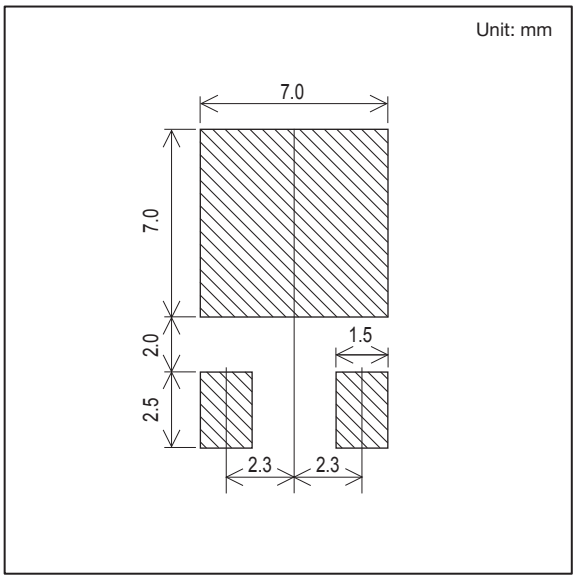
Outline Drawing

SFT1452-TL-H, SFT1452-TL-W



Land Pattern Example



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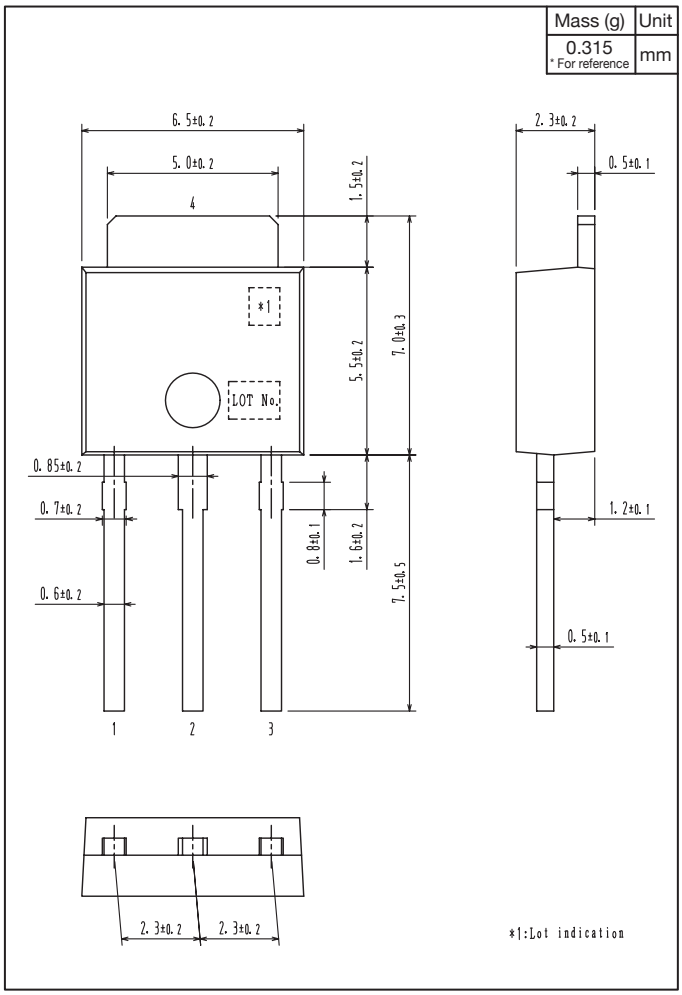
Outline Drawing

SFT1452-H, SFT1452-W



Note on usage : Since the SFT1452 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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