

## 2SK3748

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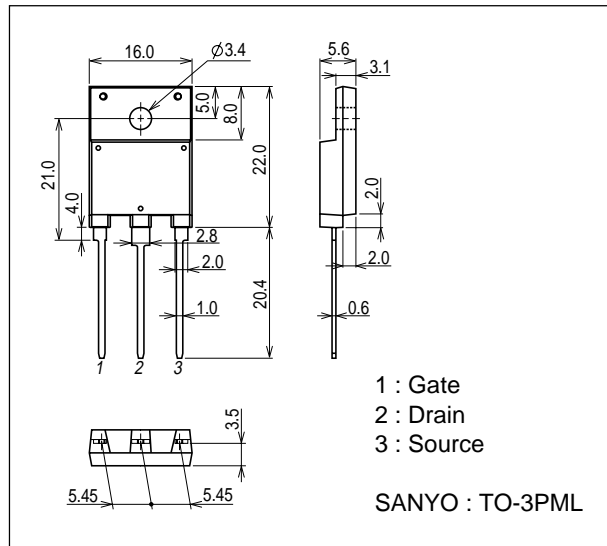
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Input Capacitance	Ciss	$V_{DS}=30V, f=1MHz$		790		pF
Output Capacitance	Coss	$V_{DS}=30V, f=1MHz$		140		pF
Reverse Transfer Capacitance	Crss	$V_{DS}=30V, f=1MHz$		70		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		17		ns
Rise Time	$t_r$	See specified Test Circuit.		75		ns
Turn-OFF Delay Time	$t_{d(off)}$	See specified Test Circuit.		360		ns
Fall Time	$t_f$	See specified Test Circuit.		116		ns
Total Gate Charge	Qg	$V_{DS}=200V, V_{GS}=10V, I_D=4A$		80		nC
Gate-to-Source Charge	Qgs	$V_{DS}=200V, V_{GS}=10V, I_D=4A$		6.4		nC
Gate-to-Drain "Miller" Charge	Qgd	$V_{DS}=200V, V_{GS}=10V, I_D=4A$		36		nC
Diode Forward Voltage	$V_{SD}$	$I_S=4A, V_{GS}=0V$		0.94	1.2	V
Reverse Recovery Time	$t_{rr}$	$I_S=4A, V_{GS}=0V, di/dt=100A/\mu s$		340		ns

Note) Although the protection diode is contained between gate and source, be careful of handling enough.

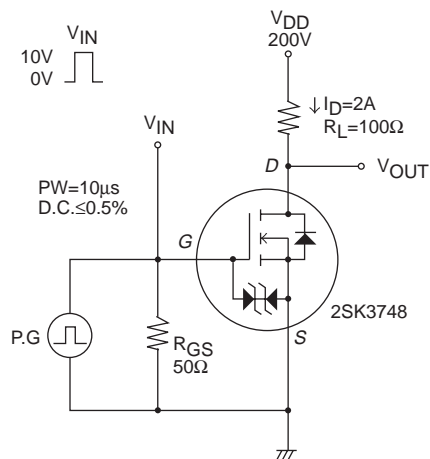
### Package Dimensions

unit : mm

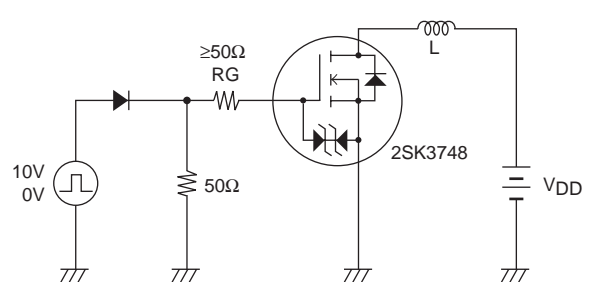
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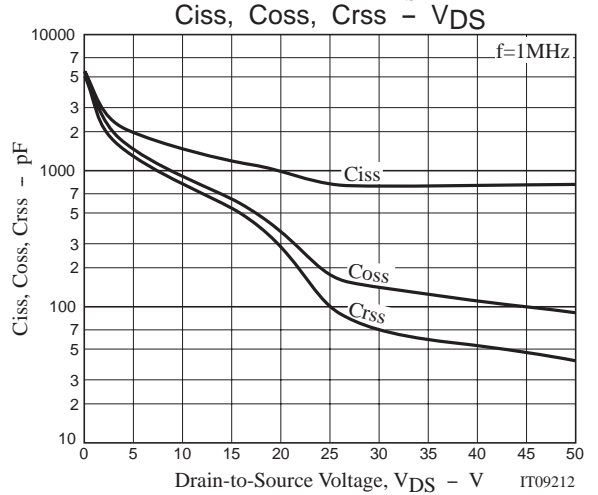
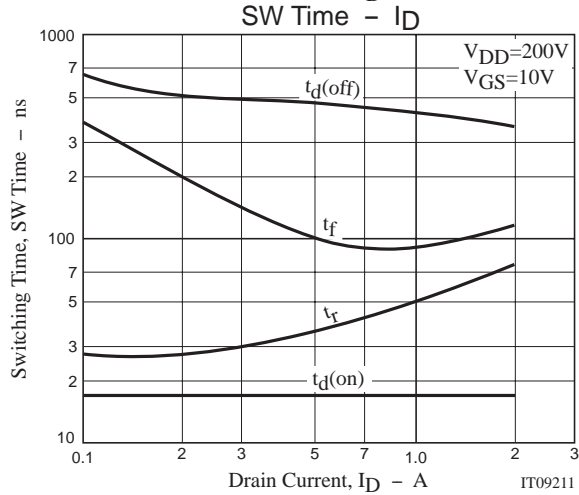
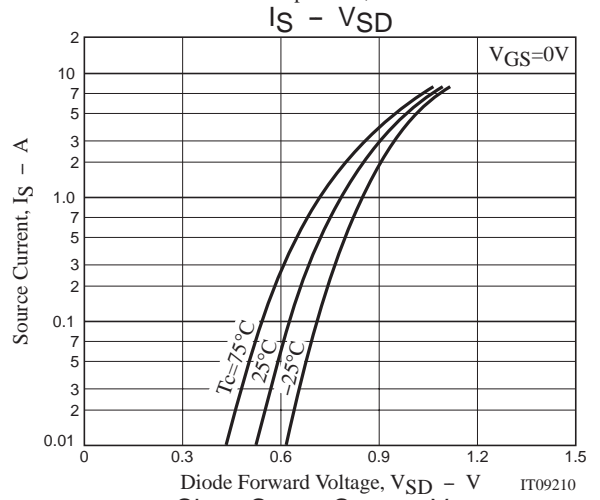
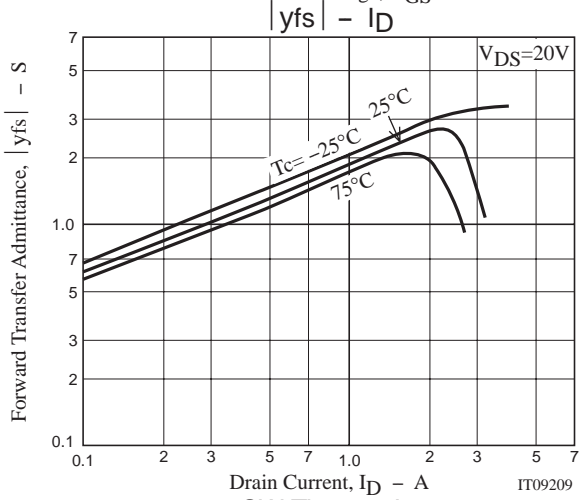
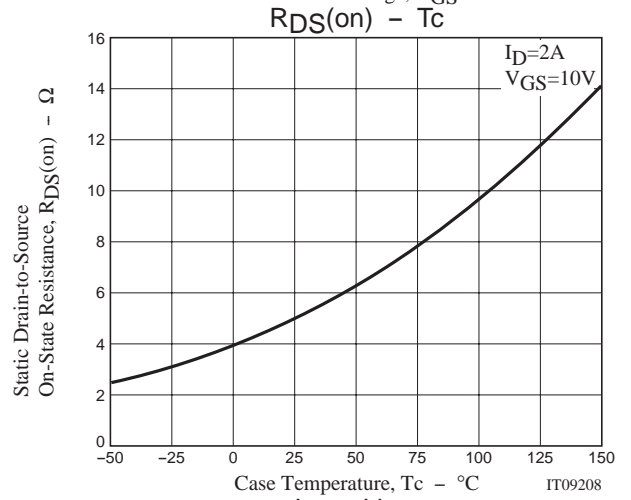
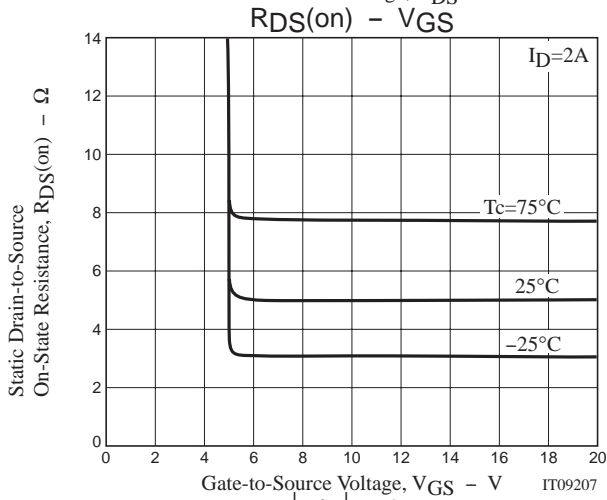
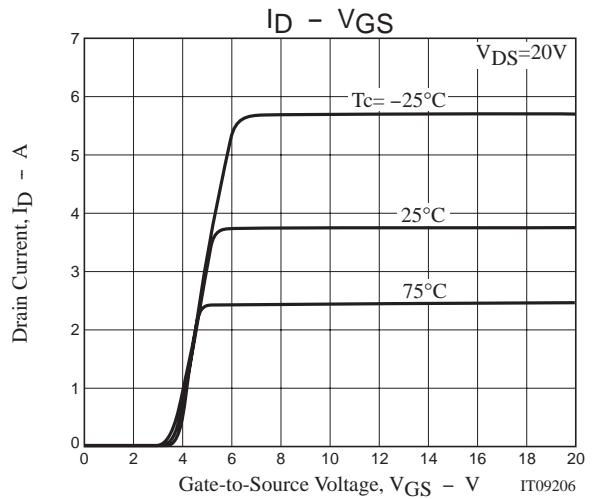
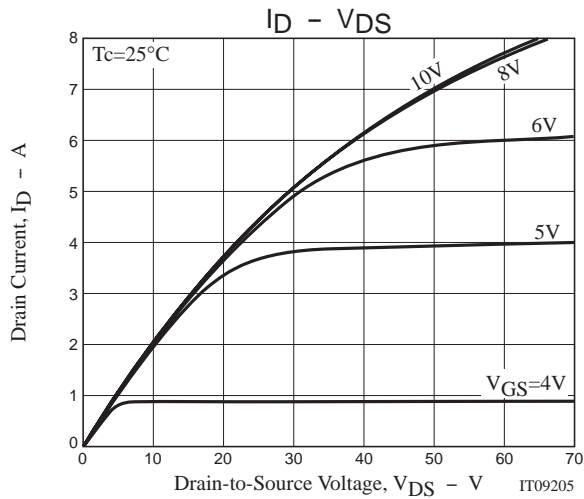


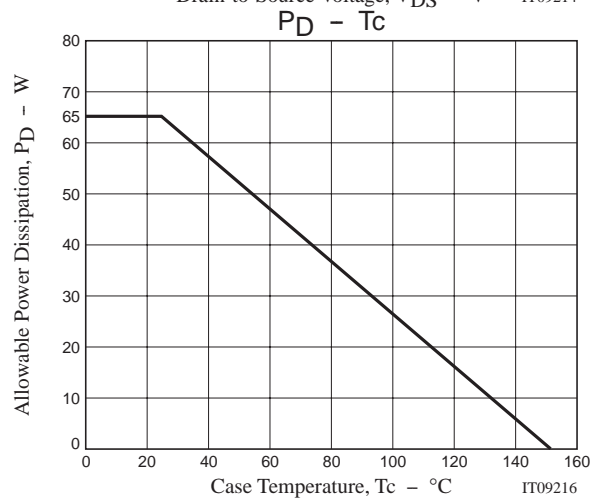
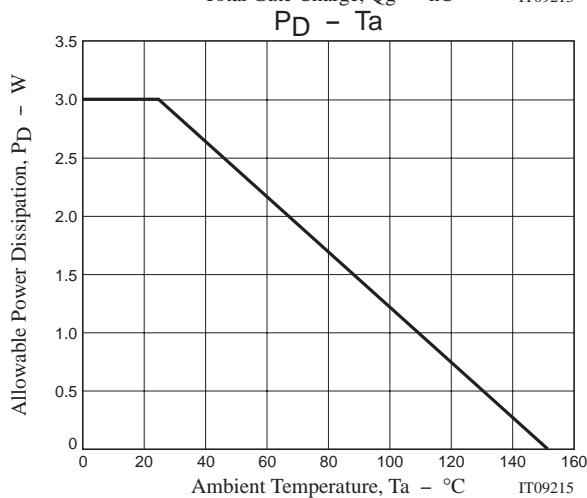
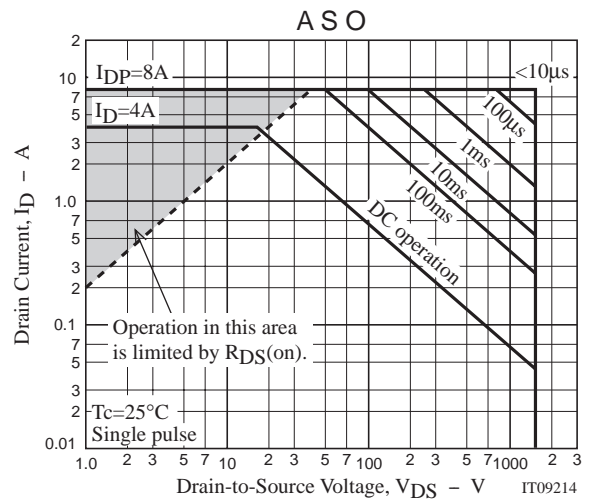
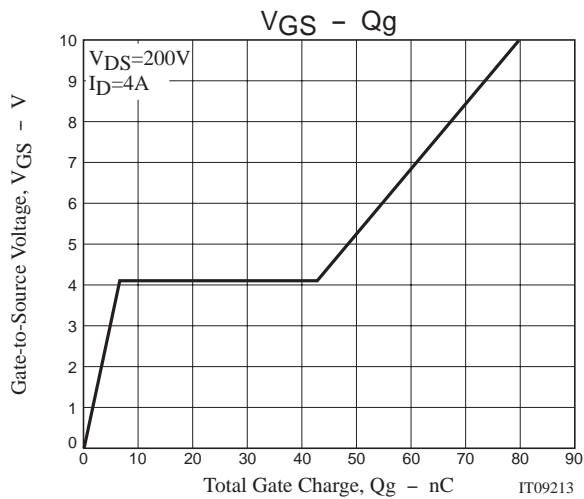
### Switching Time Test Circuit



### Avalanche Resistance Test Circuit







Note on usage : Since the 2SK3748 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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