

2SK4088LS

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain to Source Breakdown Voltage	$V_{(BR)DSS}$	$I_D=10mA, V_{GS}=0V$	650			V
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS}=520V, V_{GS}=0V$			100	μA
Gate to Source Leakage Current	I_{GSS}	$V_{GS}=\pm 30V, V_{DS}=0V$			± 100	nA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS}=10V, I_D=1mA$	3		5	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=10V, I_D=5.5A$	3.3	6.5		S
Static Drain to Source On-State Resistance	$R_{DS(on)}$	$I_D=5.5A, V_{GS}=10V$		0.65	0.85	Ω
Input Capacitance	C_{iss}	$V_{DS}=30V, f=1MHz$		1000		pF
Output Capacitance	C_{oss}			172		pF
Reverse Transfer Capacitance	C_{rss}			36		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		24		ns
Rise Time	t_r			58		ns
Turn-OFF Delay Time	$t_{d(off)}$			117		ns
Fall Time	t_f			40		ns
Total Gate Charge	Q_g	$V_{DS}=200V, V_{GS}=10V, I_D=11A$		37.6		nC
Gate to Source Charge	Q_{gs}			6.8		nC
Gate to Drain "Miller" Charge	Q_{gd}			17.6		nC
Diode Forward Voltage	V_{SD}	$I_S=11A, V_{GS}=0V$		0.9	1.2	V

Fig.1 Unclamped Inductive Switching Test Circuit

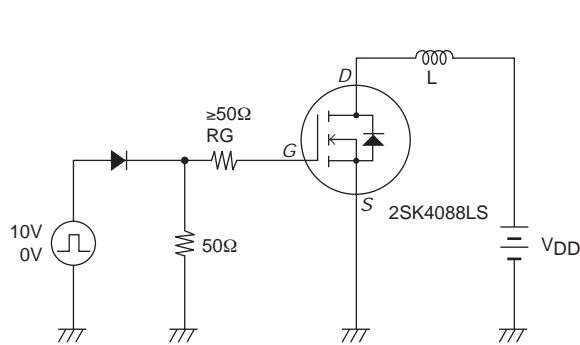
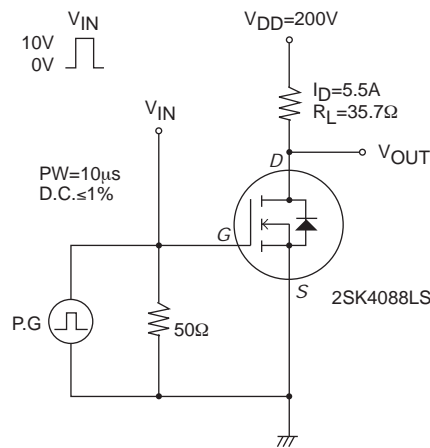
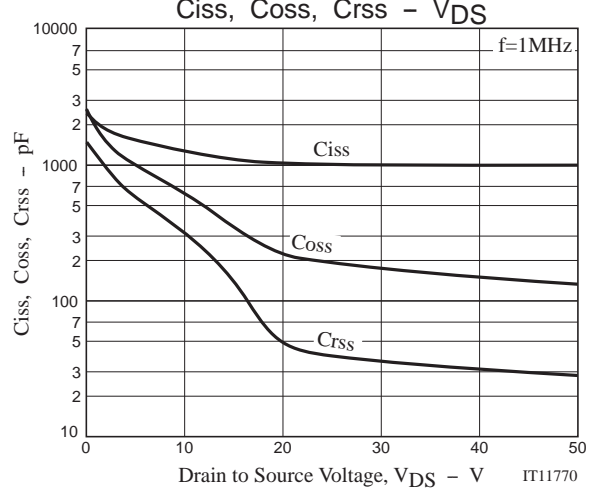
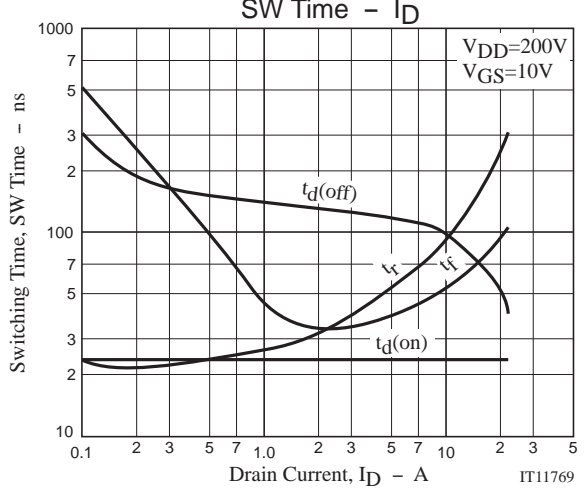
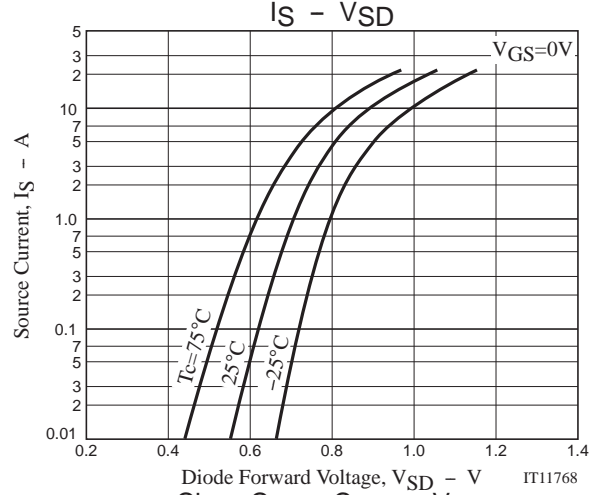
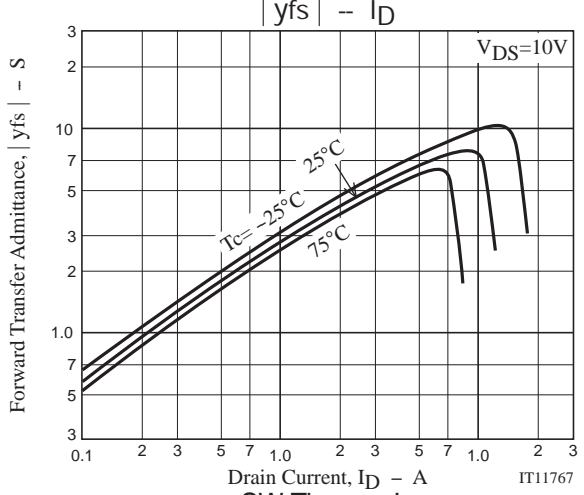
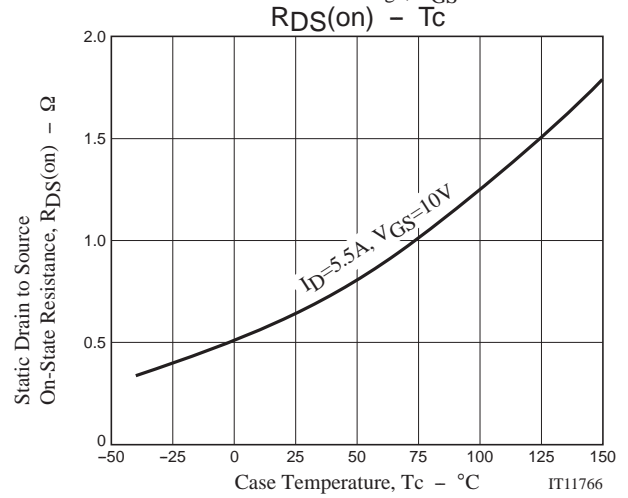
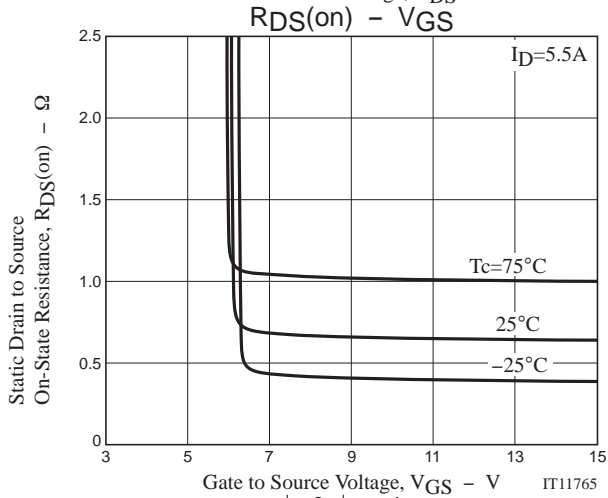
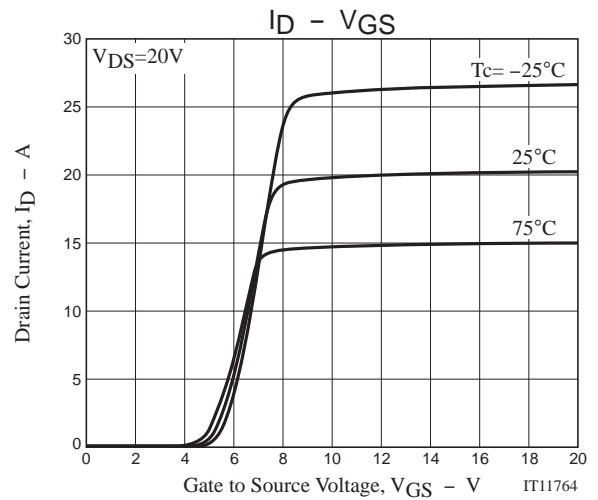
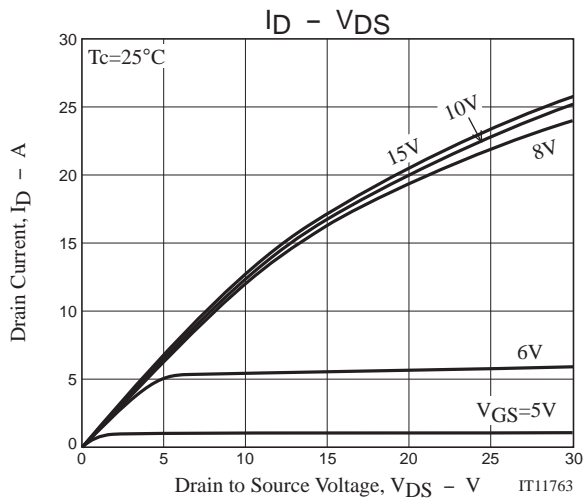
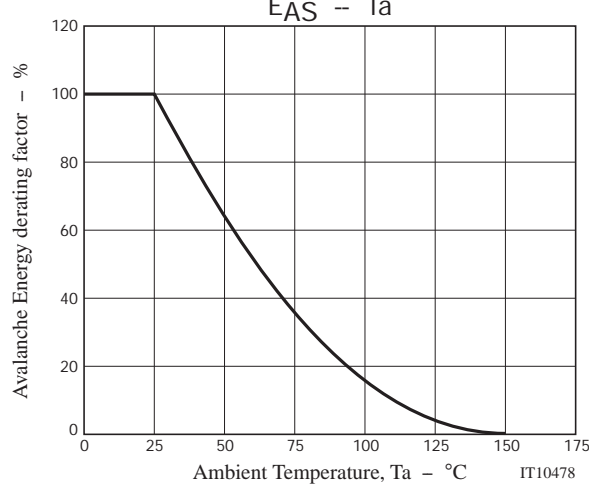
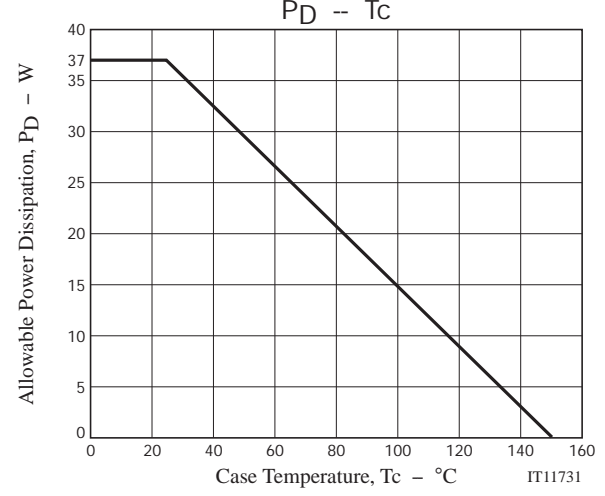
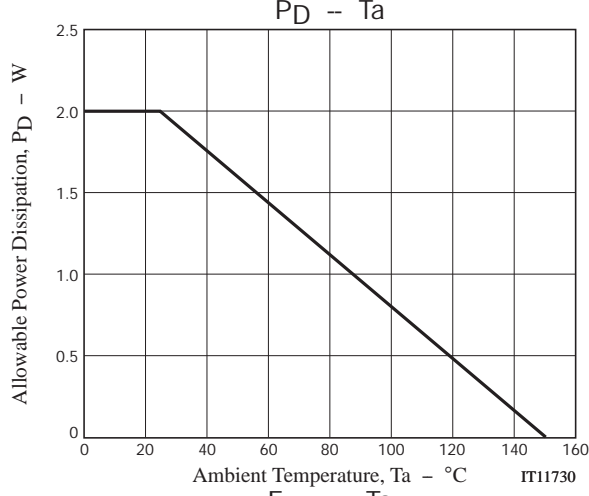
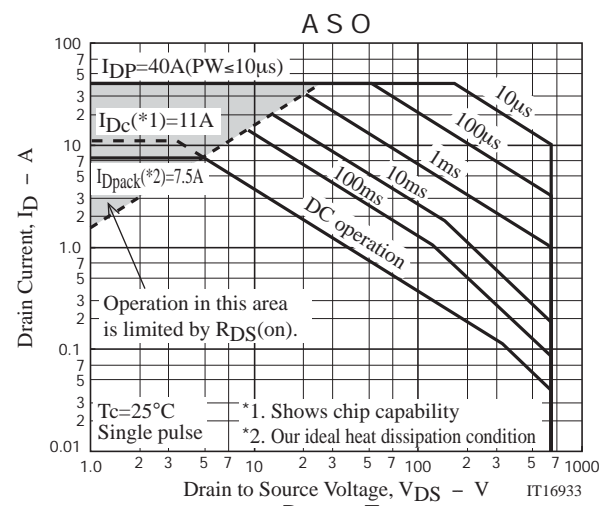
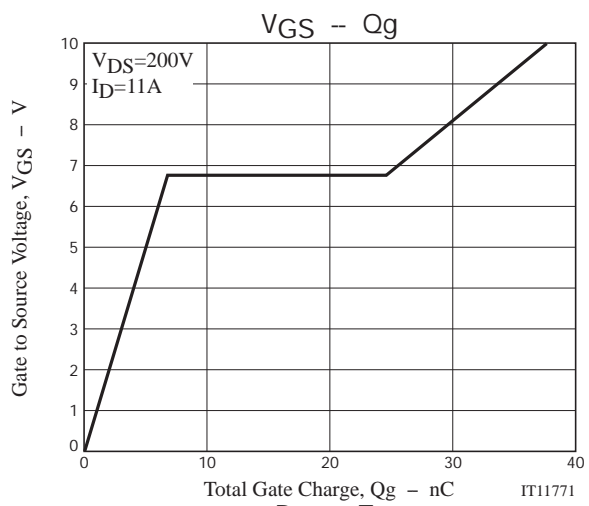


Fig.2 Switching Time Test Circuit





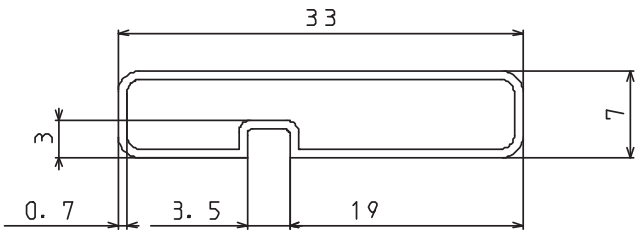


Magazine Specification
2SK4088LS-1E

1. Packing Format

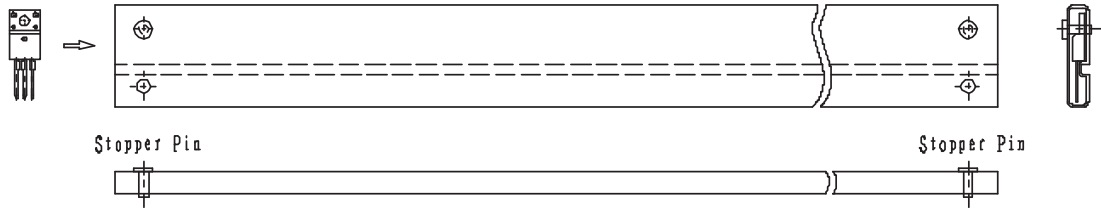
Package Name	Magazine Name	Maximum Number of devices contained (pcs)			Packing format	
		Magazine	Inner box	Outer box	Inner BOX	Outer BOX
TO-220F-3FS	TO-220F	50	1,000	4,000	SPD-0V0001 20 magazines contained Dimensions:mm {external} 568×150×55	SPT-081029 4 inner boxes contained Dimensions:mm {external} 590×225×178

2. Magazine dimensions
(unit:mm)

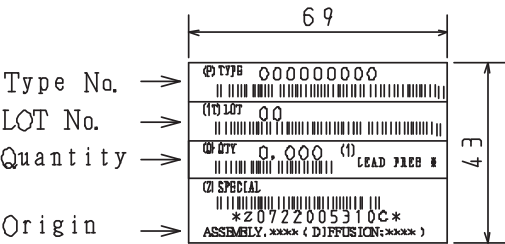


Tolerance=±0.3mm
Thickness=0.7±0.2mm
Length =532.5±2mm
Material =PVC (Antistatic treatment)

3. Storage method to magazine

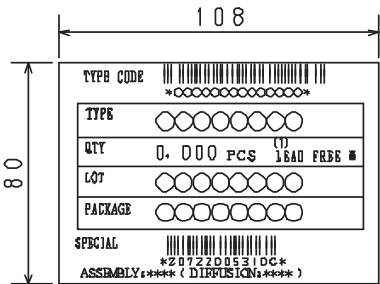


4. Inner box label (unit:mm)



5. Outer box label (unit:mm)

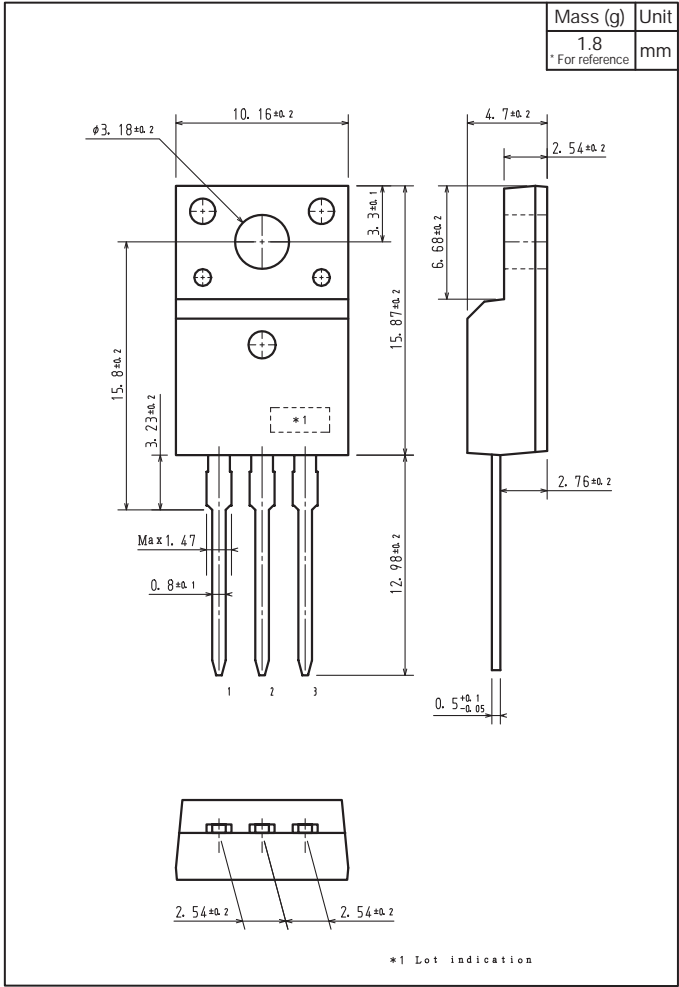
It is a label at the time of factory shipments.
The form of a label may change in physical
distribution process.



NOTE (1)
The LEAD FREE * description shows that the
surface treatment of the terminal is lead free.

Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A

Outline Drawing
2SK4088LS-1E



Note on usage : Since the 2SK4088LS is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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