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# 2SK2885(L), 2SK2885(S)

Silicon N Channel MOS FET  
High Speed Power Switching

## HITACHI

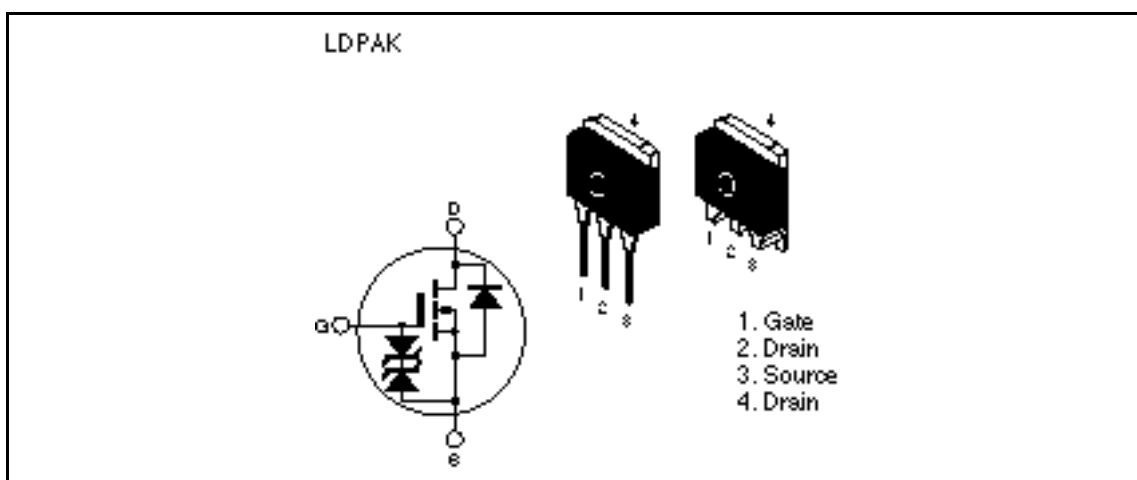
ADE-208-545 A  
2nd. Edition

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### Features

- Low on-resistance  
 $R_{DS(on)} = 10m \text{ typ.}$
- 4V gate drive devices.
- High speed switching

### Outline



## 2SK2885(L), 2SK2885(S)

### Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Ratings	Unit
Drain to source voltage	$V_{DSS}$	30	V
Gate to source voltage	$V_{GSS}$	±20	V
Drain current	$I_D$	45	A
Drain peak current	$I_{D(pulse)}^{*1}$	180	A
Body to drain diode reverse drain current	$I_{DR}$	45	A
Channel dissipation	Pch*2	75	W
Channel temperature	Tch	150	°C
Storage temperature	Tstg	-55 to +150	°C

Notes: 1. PW 10μs, duty cycle 1 %  
2. Value at Tc = 25°C

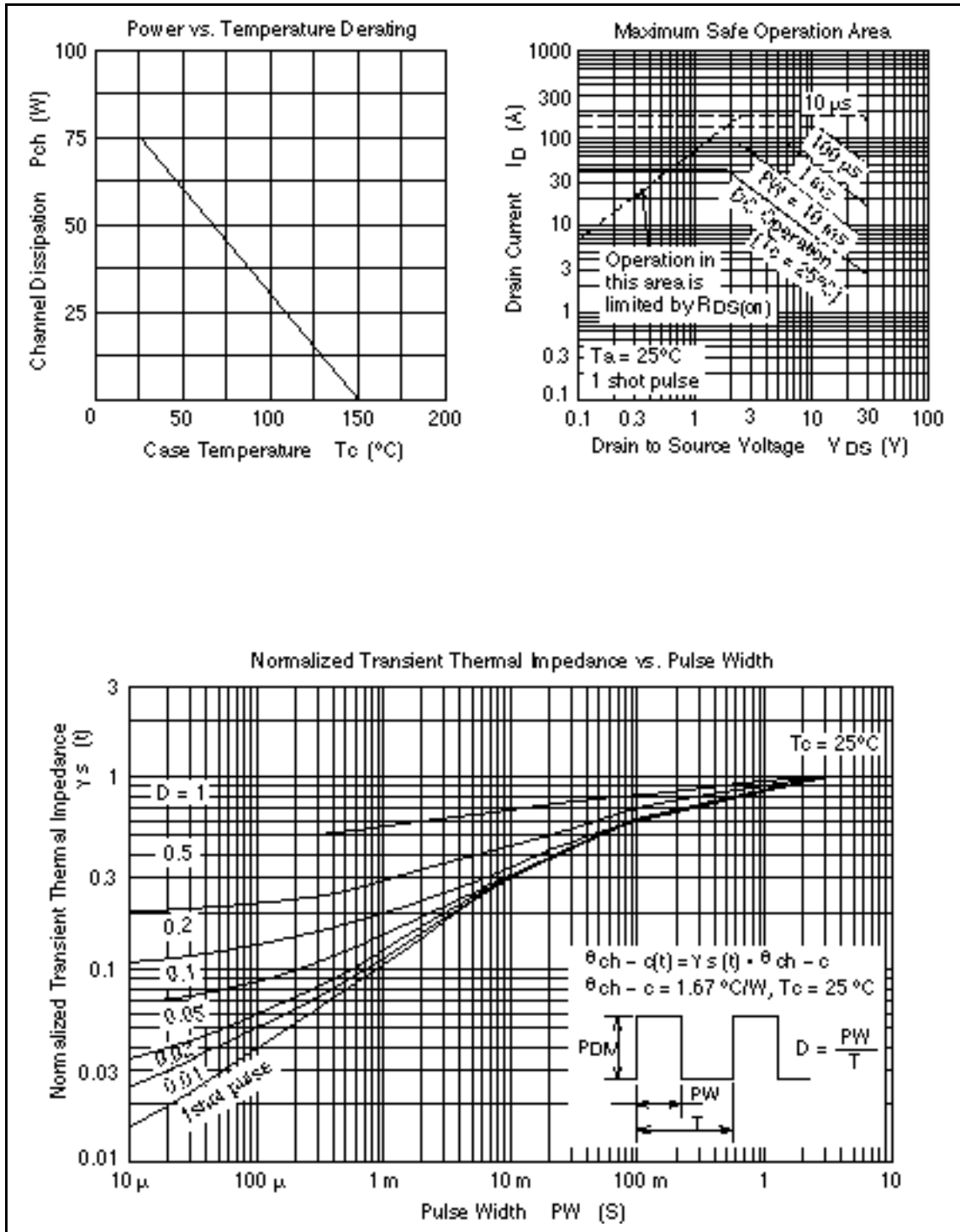
### Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Drain to source breakdown voltage	$V_{(BR)DSS}$	30	—	—	V	$I_D = 10mA, V_{GS} = 0$
Gate to source breakdown voltage	$V_{(BR)GSS}$	±20	—	—	V	$I_G = ±100μA, V_{DS} = 0$
Zero gate voltage drain current	$I_{DSS}$	—	—	10	μA	$V_{DS} = 30V, V_{GS} = 0$
Gate to source leak current	$I_{GSS}$	—	—	±10	μA	$V_{GS} = ±16V, V_{DS} = 0$
Gate to source cutoff voltage	$V_{GS(off)}$	1.0	—	2.0	V	$I_D = 1mA, V_{DS} = 10V$
Static drain to source on state resistance	$R_{DS(on)}$	—	10	14	m	$I_D = 20A, V_{GS} = 10V^{*1}$
	$R_{DS(on)}$	—	15	25	m	$I_D = 20A, V_{GS} = 4V^{*1}$
Forward transfer admittance	$ y_{fs} $	20	30	—	S	$I_D = 20A, V_{DS} = 10V^{*1}$
Input capacitance	Ciss	—	1550	—	pF	$V_{DS} = 10V$
Output capacitance	Coss	—	1050	—	pF	$V_{GS} = 0$
Reverse transfer capacitance	Crss	—	230	—	pF	f = 1MHz
Turn-on delay time	$t_{d(on)}$	—	20	—	ns	$V_{GS} = 10V, I_D = 20A$
Rise time	$t_r$	—	370	—	ns	$R_L = 0.5$
Turn-off delay time	$t_{d(off)}$	—	170	—	ns	
Fall time	$t_f$	—	180	—	ns	
Body to drain diode forward voltage	$V_{DF}$	—	0.95	—	V	$I_D = 45A, V_{GS} = 0$
Body to drain diode reverse recovery time	$t_{rr}$	—	75	—	ns	$I_F = 45A, V_{GS} = 0$ diF/ dt = 50A/μs

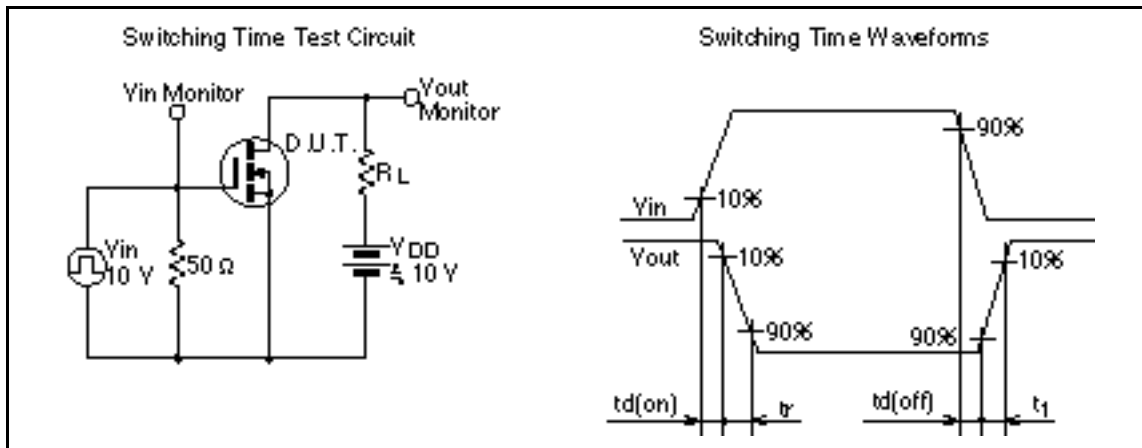
Note: 1. Pulse test

See characteristics curves of 2SK2737

Main Characteristics



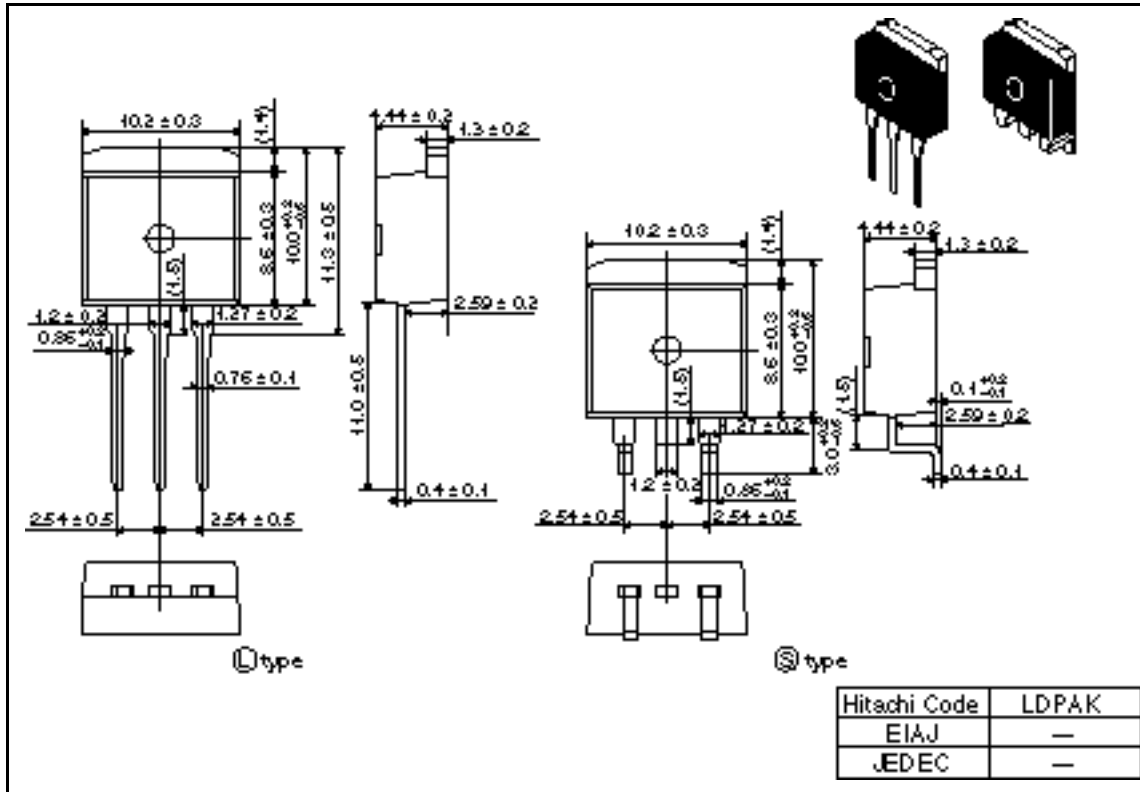
## 2SK2885(L), 2SK2885(S)



2SK2885(L), 2SK2885(S)

Package Dimensions

Unit: mm



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## 2SK2885(L), 2SK2885(S)

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