
2SK2734

Silicon N Channel MOS FET
High Speed Power Switching

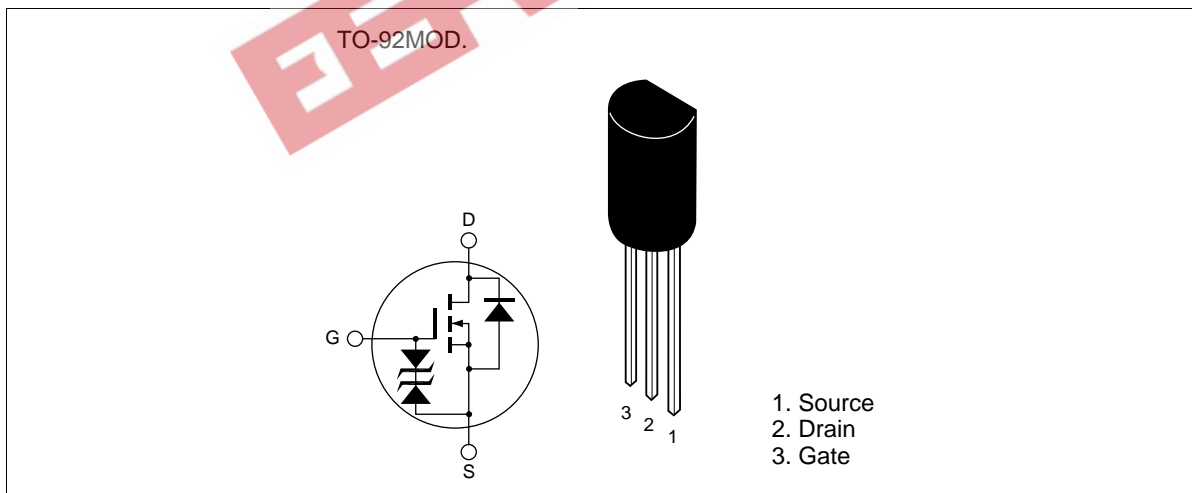
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ADE-208-520
1st. Edition

Features

- Low on-resistance
 $R_{DS(on)} = 0.04\Omega$ typ (at $V_{GS} = 10\text{ V}$, $I_D = 2.5\text{ A}$)
- 4V gate drive devices.
- Large current capacitance
 $I_D = 5\text{ A}$

Outline



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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	5	A
Drain peak current	I _{D(pulse)} *1	20	A
Body to drain diode reverse drain current	I _{DR}	5	A
Channel dissipation	P _{ch}	0.9	W
Channel temperature	T _{ch}	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

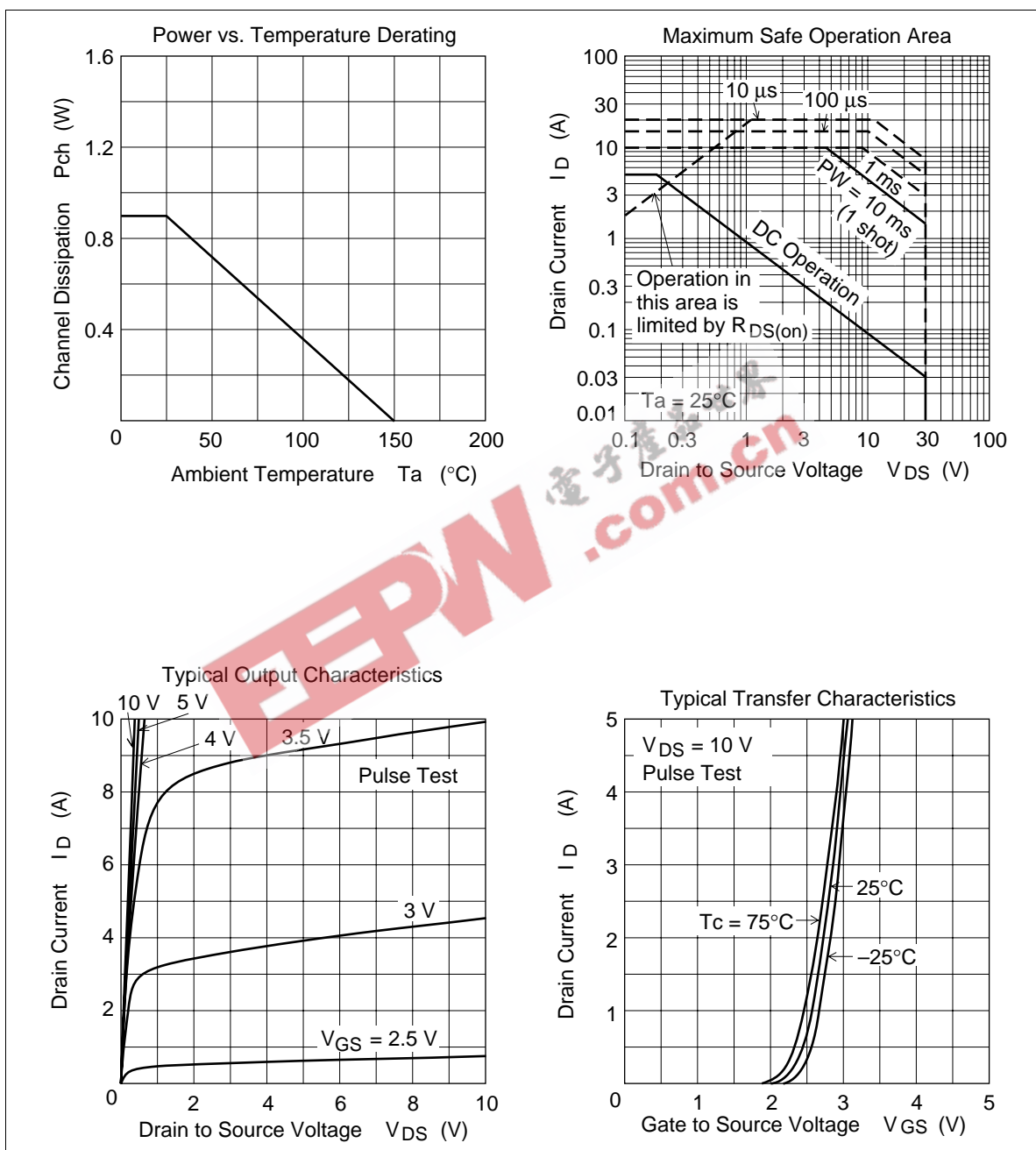
Note: 1. PW ≤ 10μs, duty cycle ≤ 1 %

Electrical Characteristics (Ta = 25°C)

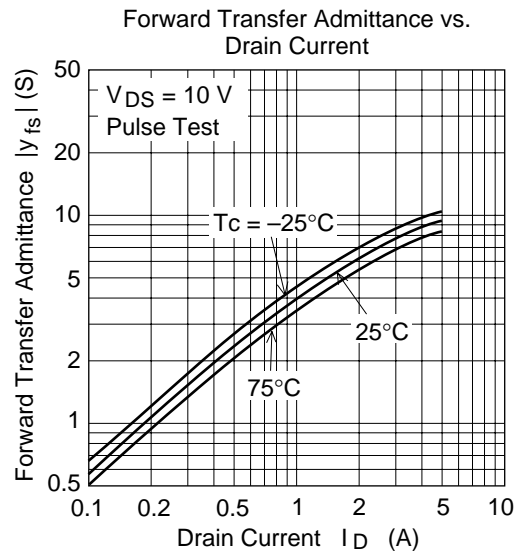
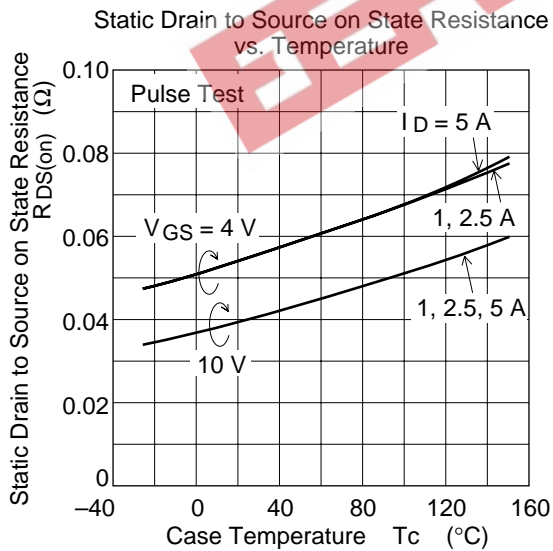
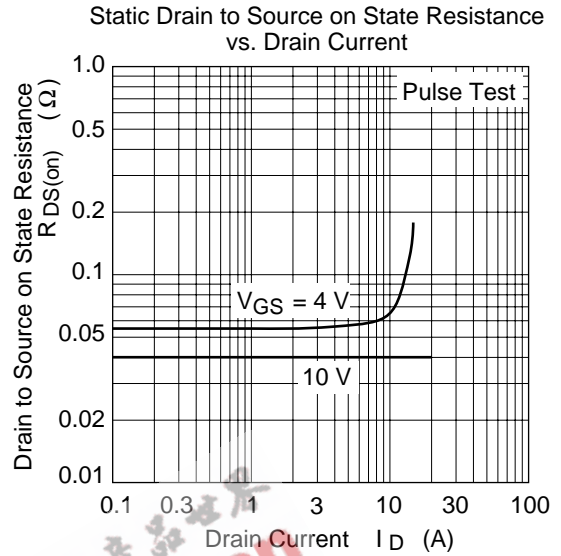
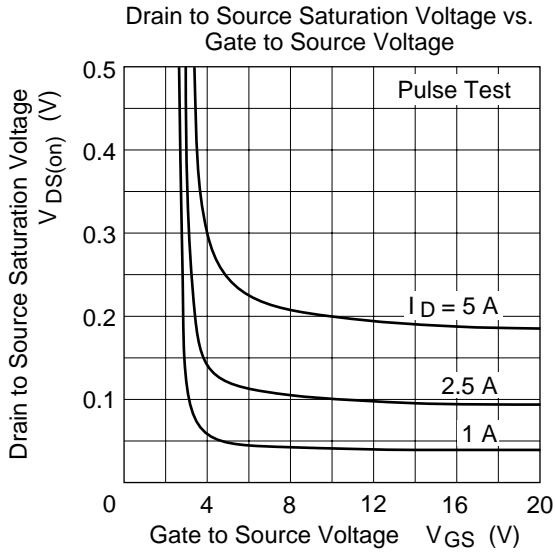
Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Drain to source breakdown voltage	V _{(BR)DSS}	30	—	—	V	I _D = 10mA, V _{GS} = 0
Gate to source breakdown voltage	V _{(BR)GSS}	±20	—	—	V	I _G = ±100μA, V _{DS} = 0
Zero gate voltage drain current	I _{DSS}	—	—	10	μA	V _{DS} = 30 V, V _{GS} = 0
Gate to source 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)}	—	0.04	0.055	Ω	I _D = 2.5A, V _{GS} = 10V*1
	R _{DS(on)}	—	0.055	0.08	Ω	I _D = 2.5A, V _{GS} = 4V*1
Forward transfer admittance	y _{fs}	4	7	—	S	I _D = 2.5A, V _{DS} = 10V*1
Input capacitance	C _{iss}	—	550	—	pF	V _{DS} = 10V
Output capacitance	C _{oss}	—	380	—	pF	V _{GS} = 0
Reverse transfer capacitance	C _{rss}	—	155	—	pF	f = 1MHz
Turn-on delay time	t _{d(on)}	—	14	—	ns	V _{GS} = 10V, I _D = 2.5A
Rise time	t _r	—	80	—	ns	R _L = 4Ω
Turn-off delay time	t _{d(off)}	—	80	—	ns	
Fall time	t _f	—	65	—	ns	
Body to drain diode forward voltage	V _{DF}	—	1.0	—	V	I _F = 5A, V _{GS} = 0
Body to drain diode reverse recovery time	t _{rr}	—	40	—	ns	I _F = 5A, V _{GS} = 0 di _F /dt = 50A/μs

Note: 1. Pulse test

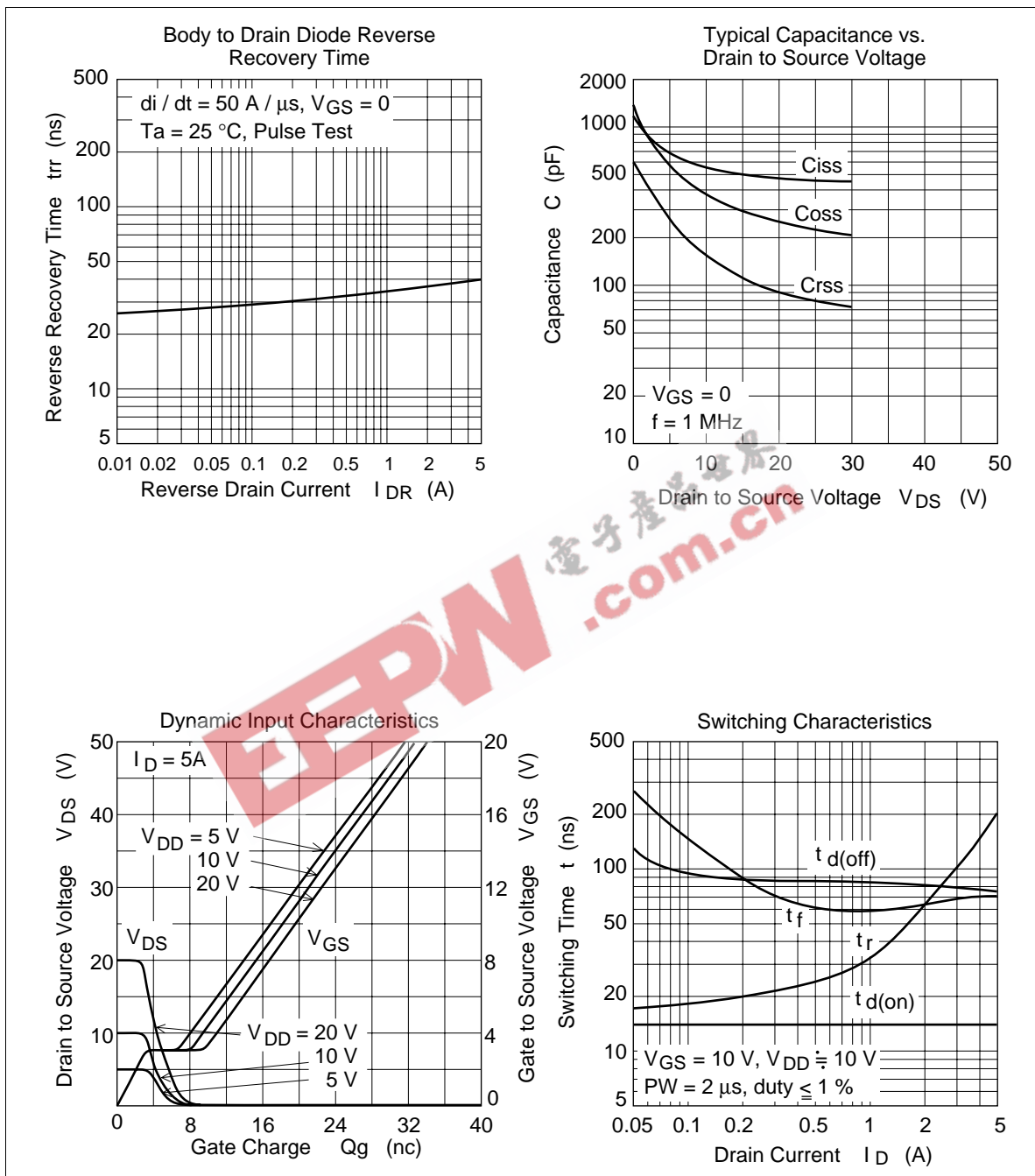
Main Characteristics

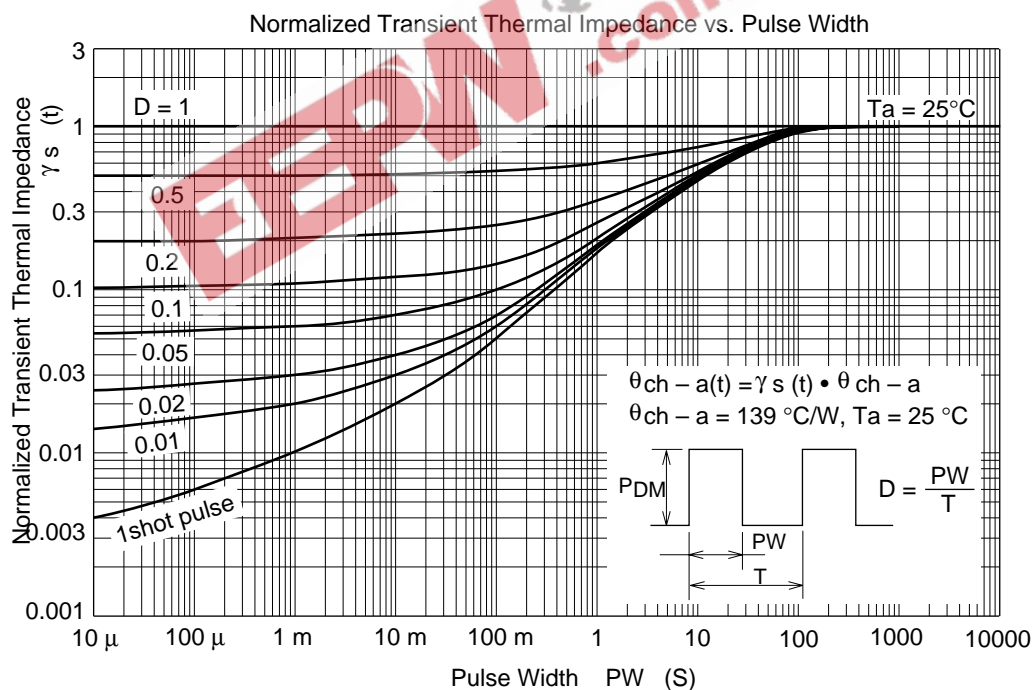
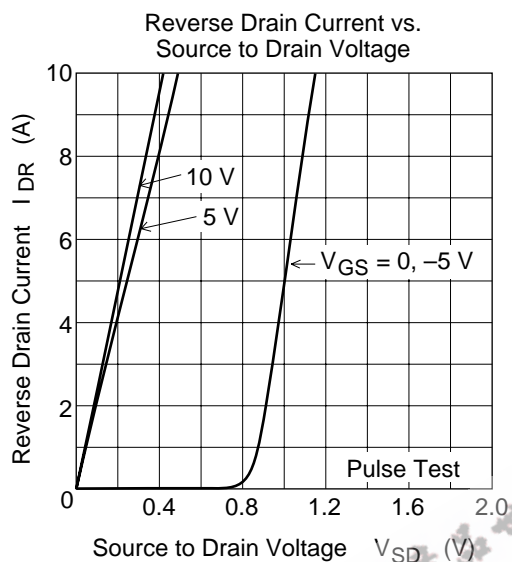


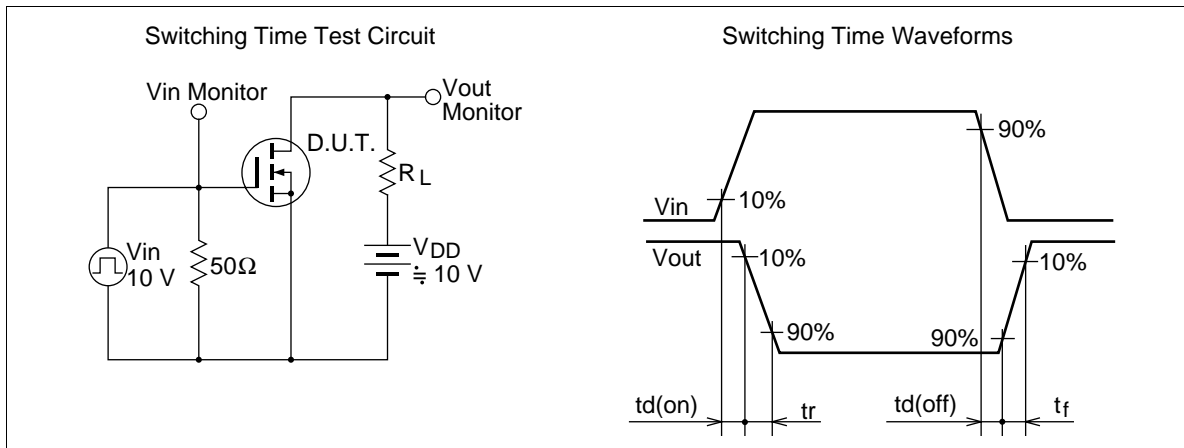
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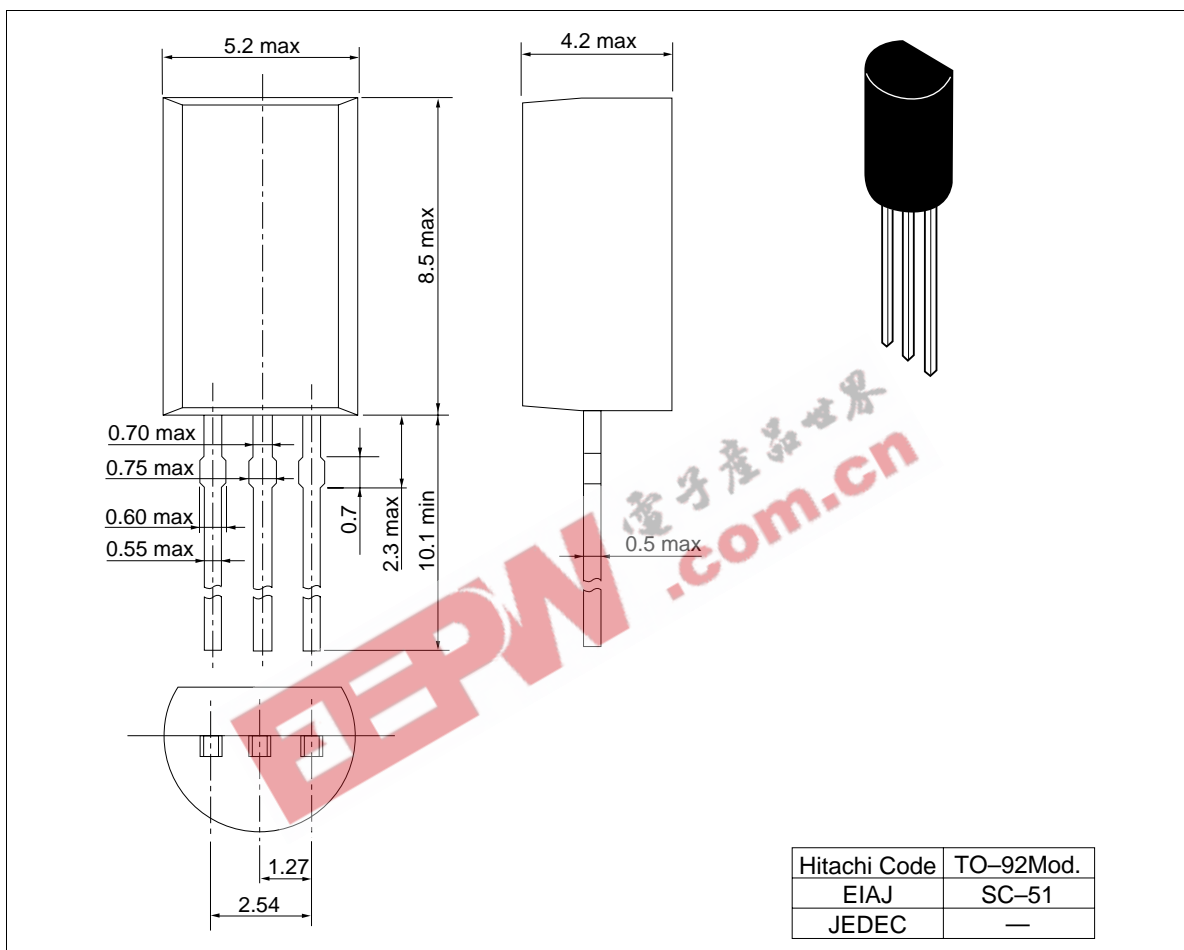


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Package Dimentions

Unit: mm



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