

### Features and Applications

- Low ON-state resistance.
- high-speed switching.
- 4V drive.

TENTATIVE

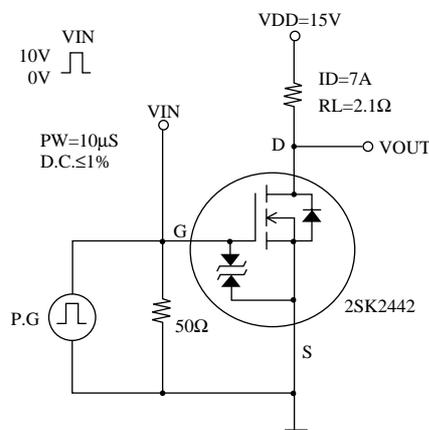
### Absolute Maximum Ratings / Ta=25°C

			unit
Drain to Source Voltage	V <sub>DSS</sub>	30	V
Gate to Source Voltage	V <sub>GSS</sub>	±20	V
Drain Current (D.C)	I <sub>D</sub>	7	A
Drain Current (Pulse)	IDP	PW≤10μs, dutycycle≤1%	48
Allowable power Dissipation	PD	Mounted on ceramic board (1000mm <sup>2</sup> ×0.8mm)	2.0
Channel Temperature	T <sub>ch</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 to +150	°C

### Electrical Characteristics / Ta=25°C

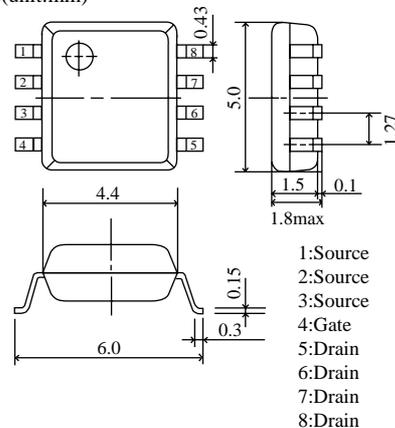
			min	typ	max	unit
Drain to Source Breakdown Voltage	V(BR) <sub>DSS</sub>	I <sub>D</sub> =1mA, V <sub>GS</sub> =0	30			V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> =30V, V <sub>GS</sub> =0			100	μA
Gate to Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> =±16V, V <sub>DS</sub> =0			±10	μA
Cutoff Voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =1mA	1.0		2.5	V
Forward Transfer Admittance	y <sub>fs</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =7A	8	12		S
Static Drain to Source On State Resistance	R <sub>DS(on)1</sub>	I <sub>D</sub> =7A, V <sub>GS</sub> =10V		24	29	mΩ
On State Resistance	R <sub>DS(on)2</sub>	I <sub>D</sub> =4A, V <sub>GS</sub> =4V		34	48	mΩ
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> =10V, f=1MHz		1000		pF
Output Capacitance	C <sub>oss</sub>	V <sub>DS</sub> =10V, f=1MHz		780		pF
Reverse Transfer Capacitance	C <sub>rss</sub>	V <sub>DS</sub> =10V, f=1MHz		220		pF
Turn-ON Delay Time	t <sub>d(on)</sub>	See Specified Test Circuit.		15		ns
Rise Time	t <sub>r</sub>	"		220		ns
Turn-off Delay Time	t <sub>d(off)</sub>	"		190		ns
Fall Time	t <sub>f</sub>	"		230		ns
Diode Forward Voltage	V <sub>SD</sub>	I <sub>S</sub> =7A, V <sub>GS</sub> =0		1.0	1.2	V

### Switching Time Test Circuit



### Case Outline (unit:mm)

SOP8(unit:mm)



Specifications and information herein are subject to change without notice.

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