

# Surface-mount MOS FET Array SDK08

## Absolute Maximum Ratings (Ta=25°C)

Symbol	Ratings	Unit
V <sub>DSS</sub>	50	V
V <sub>GSS</sub>	±20	V
I <sub>D</sub>	±4.5	A
I <sub>D</sub> (pulse)*1	±9	A
P <sub>T</sub>	4 (Tc=25°C, 4 circuits operate)	W
E <sub>AS</sub> *2	80	mJ
T <sub>ch</sub>	150	°C
T <sub>stg</sub>	-55 to +150	°C

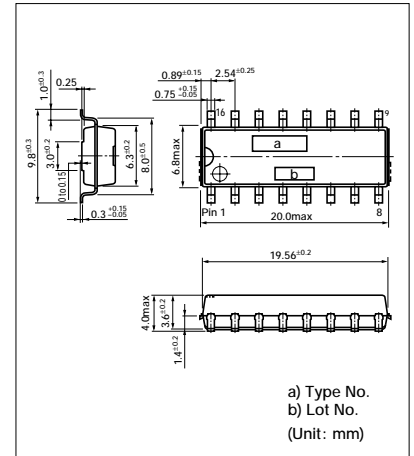
\*1 P<sub>W</sub> ≤ 100μs, duty ≤ 1%

\*2 V<sub>DD</sub> = 12V, L = 10mH, unclamped, R<sub>G</sub> = 50Ω

## Electrical Characteristics (Ta=25°C)

Symbol	Test Conditions	Ratings			Unit
		min	typ	max	
V <sub>(BR) DSS</sub>	I <sub>D</sub> = 100μA, V <sub>GS</sub> = 0V	50			V
I <sub>GSS</sub>	V <sub>GS</sub> = ±20V			±100	nA
I <sub>DSS</sub>	V <sub>DS</sub> = 50V, V <sub>GS</sub> = 0V			100	μA
V <sub>TH</sub>	V <sub>DS</sub> = 10V, I <sub>D</sub> = 1mA	1.3	1.8	2.3	V
Re (yfs)	V <sub>DS</sub> = 10V, I <sub>D</sub> = 4.0A	5.0	9.0	13.0	S
R <sub>DS (ON)</sub>	V <sub>GS</sub> = 10V, I <sub>D</sub> = 4.0A		0.07	0.08	Ω
	V <sub>GS</sub> = 4V, I <sub>D</sub> = 4.0A		0.09	0.1	Ω
C <sub>iss</sub>	V <sub>DS</sub> = 10V		700		pF
C <sub>oss</sub>	f = 1.0MHz		300		pF
C <sub>rss</sub>	V <sub>GS</sub> = 0V		90		pF
t <sub>d (on)</sub>	I <sub>D</sub> = 4A		50		ns
t <sub>r</sub>	V <sub>DD</sub> = 12V R <sub>L</sub> = 3Ω		80		ns
t <sub>d (off)</sub>	V <sub>GS</sub> = 5V		60		ns
t <sub>f</sub>	R <sub>G</sub> = 50Ω		40		ns
V <sub>SD</sub>	I <sub>SD</sub> = 6A, V <sub>GS</sub> = 0V		1.0	1.5	V

## External Dimensions SMD-16A



## Equivalent Circuit Diagram

