

Surface-mount MOS FET Array — SDK06 (under development)

Absolute Maximum Ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{DSS}	52±5	V
V _{GSS}	±20	V
I _D	±3	A
I _D (pulse) *1	±6	A
P _T	3 (Tc=25°C, 4 circuits operate)	W
E _{AS} *2	40	mJ
T _{ch}	150	°C
T _{stg}	-55 to +150	°C

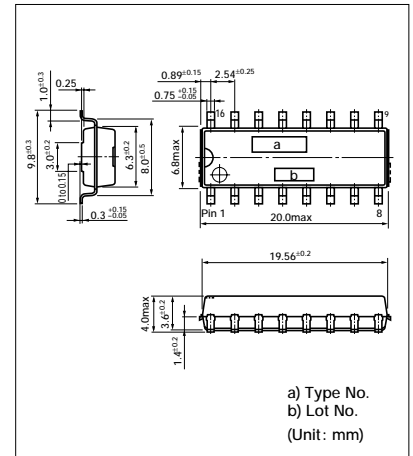
*1 P_w ≤ 100μs, duty ≤ 1%

*2 V_{DD} = 12V, L = 10mH, unclamped, R_G = 10Ω

Electrical Characteristics (Ta=25°C)

Symbol	Test Conditions	Ratings			Unit
		min	typ	max	
V(BR) DSS	I _D = 1mA, V _{GS} = 0V	47	52	57	V
I _{GSS}	V _{GS} = ±20V			±1.0	μA
I _{DSS}	V _{DS} = 40V, V _{GS} = 0V			100	μA
V _{TH}	V _{DS} = 10V, I _D = 250μA	1.0	1.8	2.5	V
Re (yfs)	V _{DS} = 10V, I _D = 1.0A	1.0			S
R _{DS (ON)}	V _{GS} = 10V, I _D = 1.0A		0.2	0.25	Ω
	V _{GS} = 4V, I _D = 1.0A		0.25	0.3	Ω
C _{iss}	V _{DS} = 10V		200		pF
C _{oss}	f = 1.0MHz		120		pF
C _{rss}	V _{GS} = 0V		20		pF
t _{d (on)}	I _D = 1A		2.0		μs
t _r	V _{DD} = 12V R _L = 12Ω		7.4		μs
t _{d (off)}	V _{GS} = 5V		3.3		μs
t _f	R _{G1} = 50Ω, R _{G2} = 10kΩ		4.2		μs
V _{SD}	I _{SD} = 1A, V _{GS} = 0V	1.0	1.5		V

External Dimensions SMD-16A



Equivalent Circuit Diagram

