MOS FET Array SLA5098 (under development)

Absolute Maximum Ratings (Ta=25ºC)

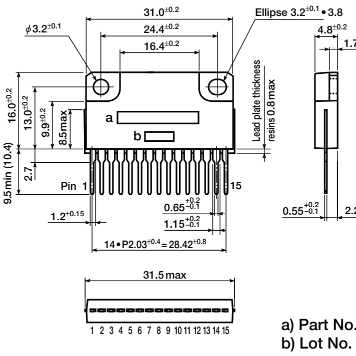
Symbol	Ratings	Unit
V_{DSS}	40	V
V_{GSS}	±20	V
I_D	20	A
$I_{D\ (pulse)}$*	40	A
E_{AS}	To be defined	mJ
I_{AS}	To be defined	A
P_T	5 (Without heatsink, Ta=25°C, All circuits operate)	W
	90 (Tc=25°C, All circuits operate)	W
Tch	150	ºC
Tstg	–55 to +150	ºC

* P_W≦100µs, duty≦1%

Electrical Characteristics (Ta=25ºC)

Symbol	Test Conditions	Ratings			Unit
		min	typ	max	
$V_{(BR)\ DSS}$	I_D=100µA, V_{GS}=0V	40			V
I_{GSS}	V_{GS}=±15V			±10	µA
I_{DSS}	V_{DS}=40V, V_{GS}=0V			100	µA
V_{TH}	V_{DS}=10V, I_D=250µA	1.5		2.5	V
Re (yfs)	V_{DS}=10V, I_D=10A	10			S
$R_{DS\ (ON)}$	V_{GS}=10V, I_D=10A			17	mΩ
Ciss	V_{DS}=10V f=1.0MHz V_{GS}=0V		1450		pF
Coss			420		pF
Crss			260		pF
$t_{d\ (on)}$	I_D=10A V_{DD}=14V R_L=1.4Ω V_{GS}=10V R_G=50Ω		40		ns
t_r			40		ns
$t_{d\ (off)}$			200		ns
t_f			100		ns
V_{SD}	I_{SD}=10A, V_{GS}=0V		0.85	1.2	V
t_{rr}	I_{SD}=10A, V_{GS}=0V di/dt=100A/µs		45		ns

External Dimensions STA4 (LF412)



a) Part No.
b) Lot No.
(Unit: mm)

Equivalent Circuit Diagram