

MOS FET Array SLA5027

Absolute Maximum Ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{DSS}	60	V
V _{GSS}	±20	V
I _D	±12	A
I _D (pulse)*1	±48	A
P _T	5 (Ta=25°C, 4 circuits operate) 60 (Tc=25°C, 4 circuits operate)	W
E _{AS} *2	250	mJ
θj-c	2.08	°C/W
V _{ISO}	(Fin to lead terminal) AC1000	Vrms
T _{ch}	150	°C
T _{stg}	-55 to +150	°C

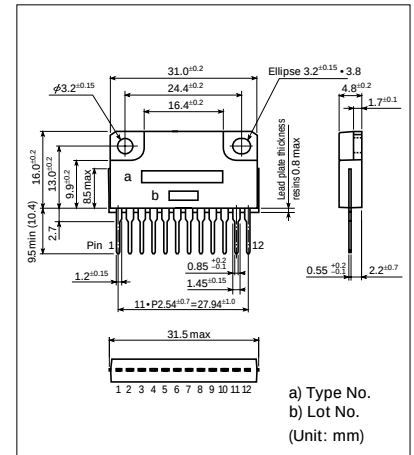
*1 P_W ≤ 250μs, duty ≤ 1%

*2 V_{DO} = 30V, L = 10mH, unclamped, R_G = 50Ω

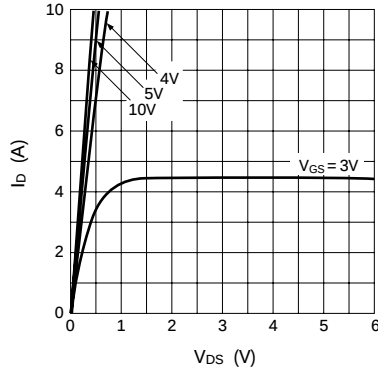
Electrical Characteristics (Ta=25°C)

Symbol	Test Conditions	Ratings			Unit
		min	typ	max	
V _(BR) DSS	I _D = 100μA, V _{GS} = 0V	60			V
I _{GSS}	V _{GS} = ±20V			±100	μA
I _{DSS}	V _{DS} = 60V, V _{GS} = 0V			100	μA
V _{TH}	V _{DS} = 10V, I _D = 1mA	1.0	1.5	2.0	V
R _e (yfs)	V _{DS} = 10V, I _D = 8A	6.0	12.0		S
R _{DS} (ON)	V _{GS} = 4V, I _D = 8A		0.07	0.08	Ω
C _{iss}	V _{DS} = 10V f = 1.0MHz		1100		pF
C _{oss}	V _{GS} = 0V		500		pF
C _{rss}	V _{GS} = 0V		170		pF
t _d (on)	I _D = 8A V _{DD} = 30V R _L = 3.75Ω		50		ns
t _r	V _{GS} = 5V R _G = 50Ω		250		ns
t _d (off)	V _{GS} = 5V R _G = 50Ω		250		ns
t _f	V _{GS} = 5V R _G = 50Ω		180		ns
V _{SD}	I _{SD} = 10A, V _{GS} = 0V		1.0	1.5	V

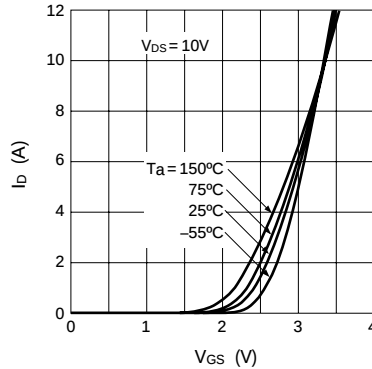
External Dimensions SLA (LF800)



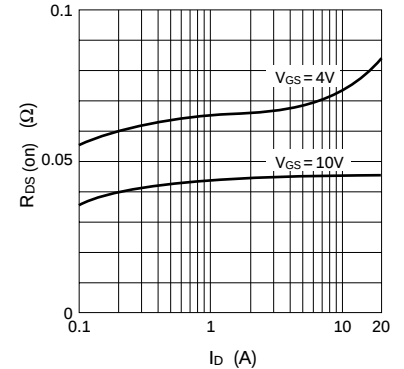
I_D—V_{DS} Characteristics



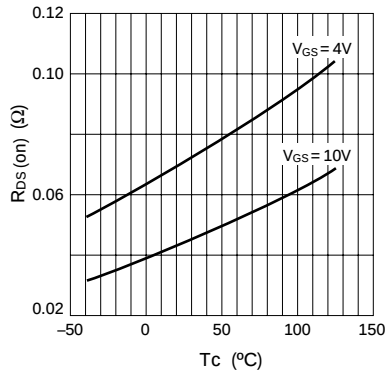
I_D—V_{GS} Characteristics



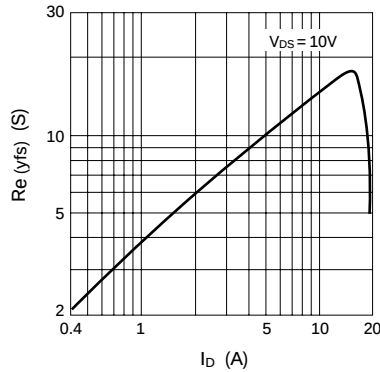
R_{DS} (on)—I_D Characteristics



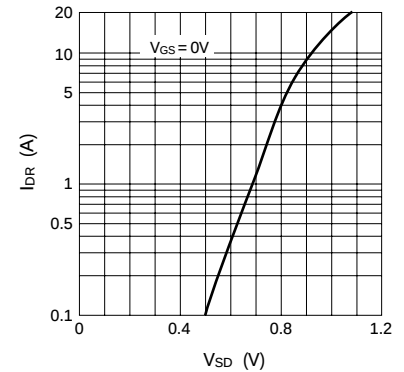
R_{DS} (on)—T_C Characteristics



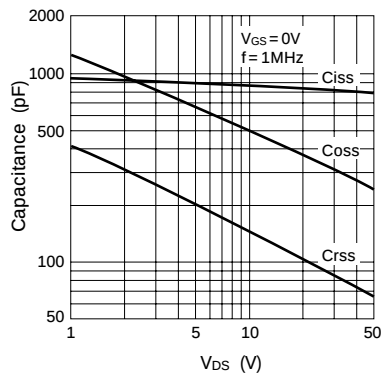
R_e (yfs)—I_D Characteristics



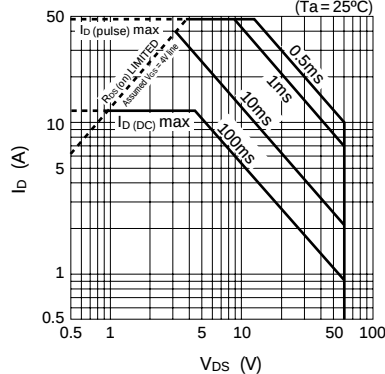
I_{DR}—V_{SD} Characteristics



Capacitance—V_{DS} Characteristics



Safe Operating Area (single pulse)



Equivalent Circuit Diagram

