Absolute Maximum Ratings (Ta=25ºC)

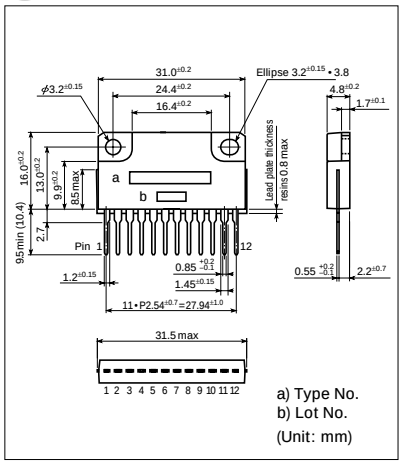
Symbol	Ratings	Unit
V_{DSS}	60	V
V_{GSS}	±20	V
I_D	±12	A
$I_{D\,(pulse)}$*1	±48	A
P_T	5 (Ta=25ºC, 4 circuits operate)	W
	60 (Tc=25ºC,4 circuits operate)	W
E_{AS}*2	250	mJ
θj-c	2.08	ºC/W
V_{ISO}	(Fin to lead terminal) AC1000	Vrms
Tch	150	ºC
Tstg	–55 to +150	ºC

*1 $P_W \leqq 250\mu s$, duty $\leqq 1\%$
*2 $V_{DD}=30V$, L=10mH, unclamped, $R_G=50\Omega$

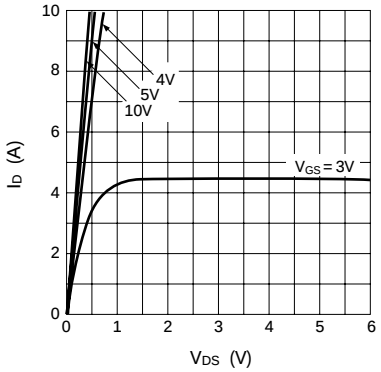
Electrical Characteristics (Ta=25ºC)

Symbol	Test Conditions	Ratings min	Ratings typ	Ratings max	Unit
$V_{(BR)\,DSS}$	$I_D=100\mu A$, $V_{GS}=0V$	60			V
I_{GSS}	$V_{GS}=\pm 20V$			±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
$Re\,(yfs)$	$V_{DS}=10V$, $I_D=8A$	6.0	12.0		S
$R_{DS\,(ON)}$	$V_{GS}=4V$, $I_D=8A$		0.07	0.08	Ω
Ciss	$V_{DS}=10V$, f=1.0MHz, $V_{GS}=0V$		1100		pF
Coss			500		pF
Crss			170		pF
$t_{d\,(on)}$	$I_D=8A$, $V_{DD}\fallingdotseq 30V$, $R_L=3.75\Omega$, $V_{GS}=5V$, $R_G=50\Omega$		50		ns
t_r			250		ns
$t_{d\,(off)}$			250		ns
t_f			180		ns
V_{SD}	$I_{SD}=10A$, $V_{GS}=0V$		1.0	1.5	V

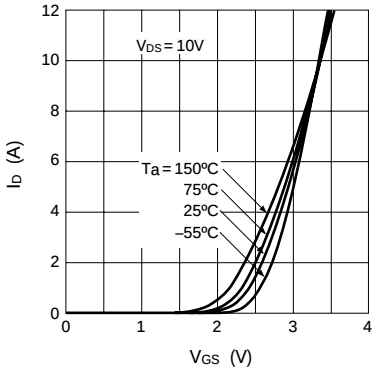
External Dimensions SLA (LF800)



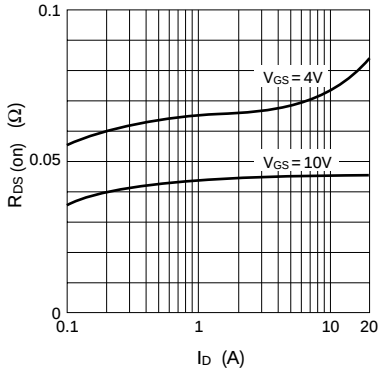
■ I_D—V_{DS} Characteristics



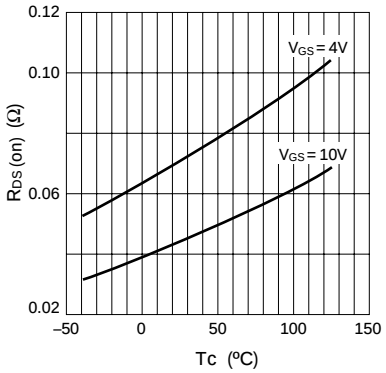
■ I_D—V_{GS} Characteristics



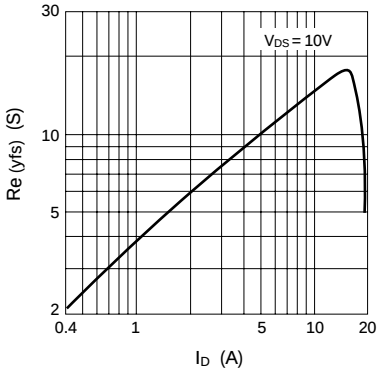
■ R_{DS} (on)—I_D Characteristics



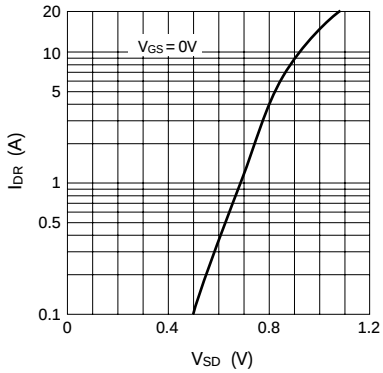
■ R_{DS} (on)—T_C Characteristics



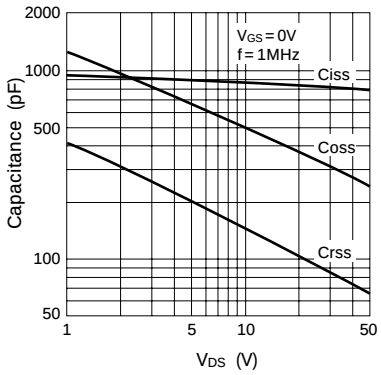
■ Re (yfs)—I_D Characteristics



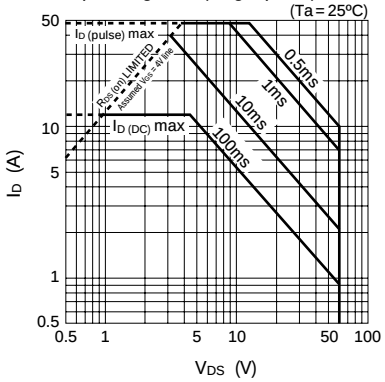
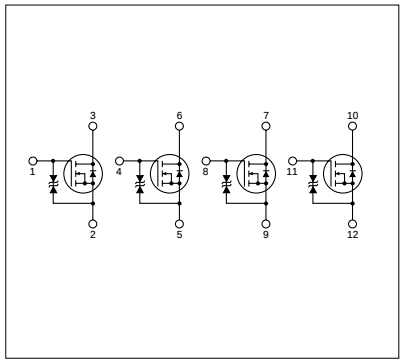
■ I_{DR}—V_{SD} Characteristics



■ Capacitance—V_{DS} Characteristics



■ Safe Operating Area (single pulse)



Equivalent Circuit Diagram