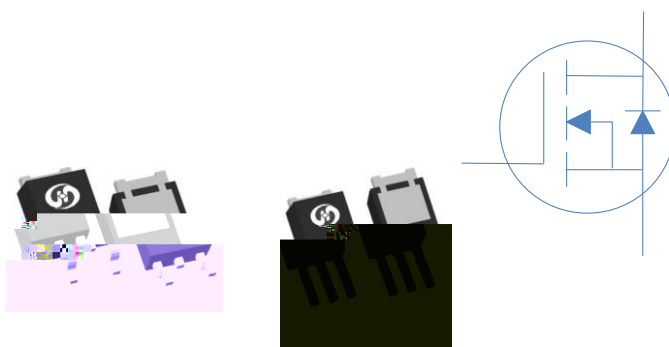


100V N-Ch Power MOSFET

V_{DS}		100	V
$R_{DS(on),typ}$	$V_{GS}=10V$	8.3	m
$R_{DS(on),typ}$	$V_{GS}=4.5V$	10.8	m
I_D (Silicon Limited)		67	A

Part Number	Package	Marking
HGD098N10SL	TO-252	GD098N10SL
HGI098N10SL	TO-251	GI098N10SL


Absolute Maximum Ratings at $T_J=25^{\circ}C$ (unless otherwise specified)

Parameter	Symbol	Conditions	Value	Unit
Continuous Drain Current (Silicon Limited)	I_D	$T_C=25^{\circ}C$	67	A
		$T_C=100^{\circ}C$	47	
Drain to Source Voltage	V_{DS}	-	100	V
Gate to Source Voltage	V_{GS}	-	± 20	V
Pulsed Drain Current	I_{DM}	-	160	A
Avalanche Energy, Single Pulse	E_{AS}	$L=0.1mH, T_C=25^{\circ}C$	31	mJ
Power Dissipation	P_D	$T_C=25^{\circ}C$	94	W
Operating and Storage Temperature	T_J, T_{stg}	-	-55 to 175	$^{\circ}C$

Absolute Maximum Ratings

Parameter	Symbol	Max	Unit
Thermal Resistance Junction-Ambient	R_{JA}	50	$^{\circ}C/W$
Thermal Resistance Junction-Case	R_{JC}	1.6	$^{\circ}C/W$

				-	
				-	
Turn on Delay Time	$t_{d(on)}$		-	13	-
		$V_{DD}=50V, I_D=20A, V_{GS}=10V,$		6	-
		$R_G=10 \Omega$		24	-
Fall Time	t_f		-	5	

-

Figure 1. Typical Output Characteristics

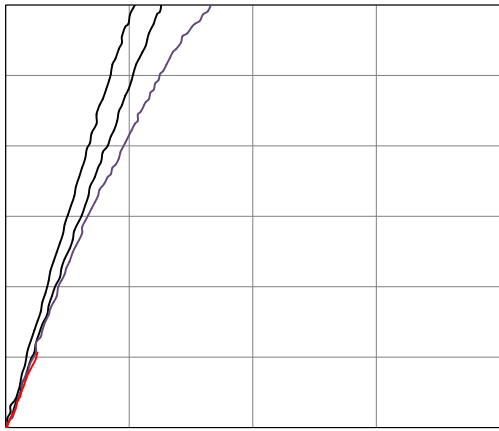


Figure 2. On-Resistance vs. Gate-Source Voltage

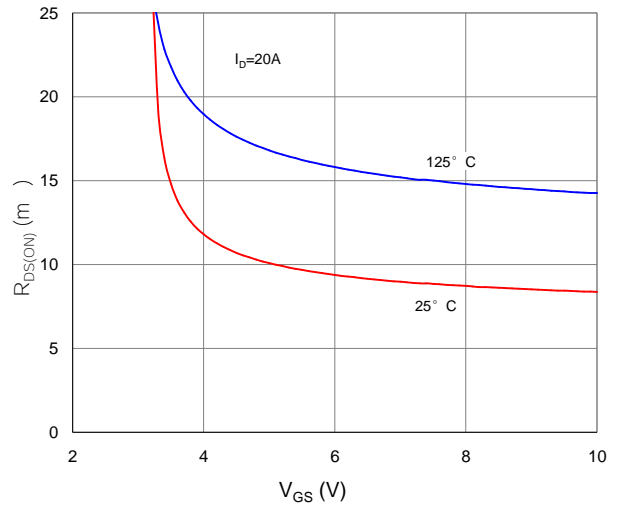


Figure 3. On-Resistance vs. Drain Current and Gate Voltage

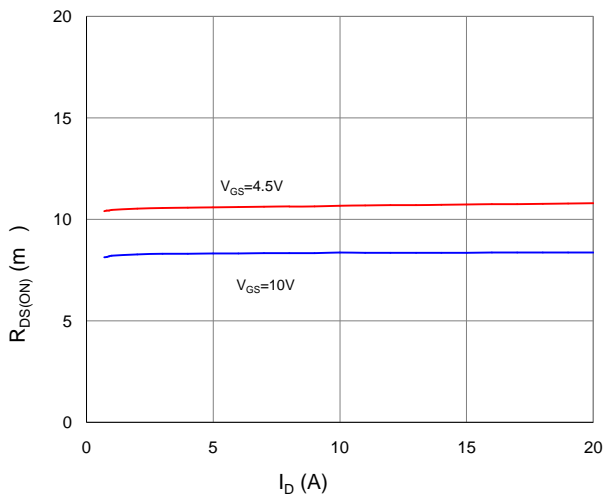


Figure 4. Normalized On-Resistance vs. Junction Temperature

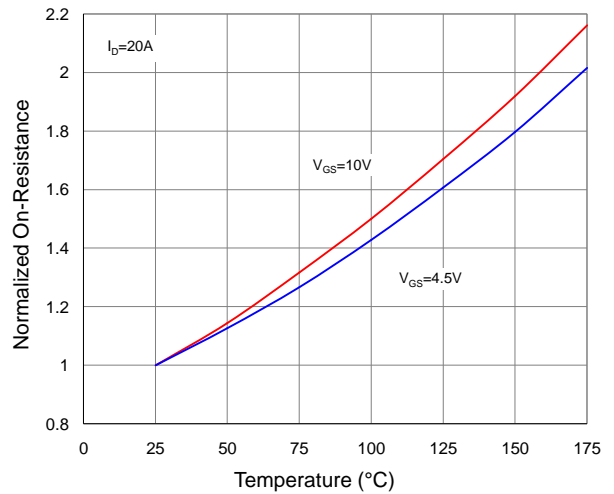


Figure 5. Typical Transfer Characteristics

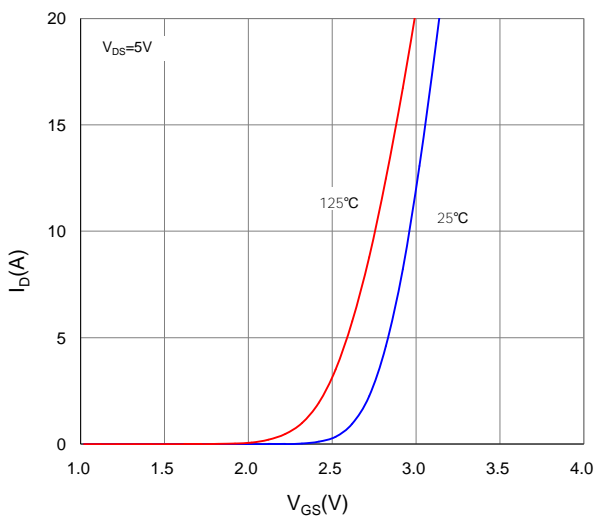
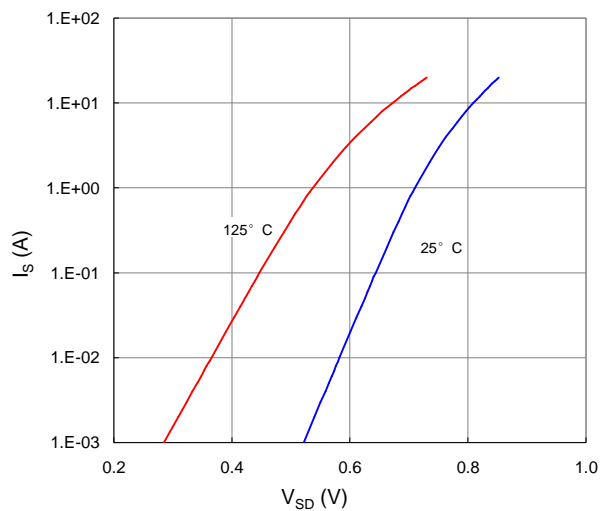


Figure 6. Typical Source-Drain Diode Forward Voltage

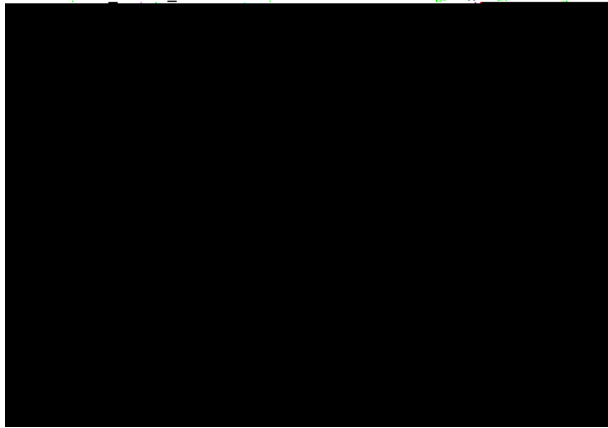




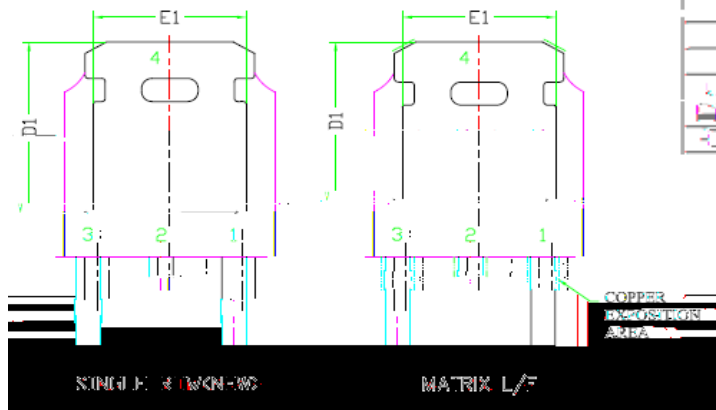


Package Outline

TO-252, 2 leads

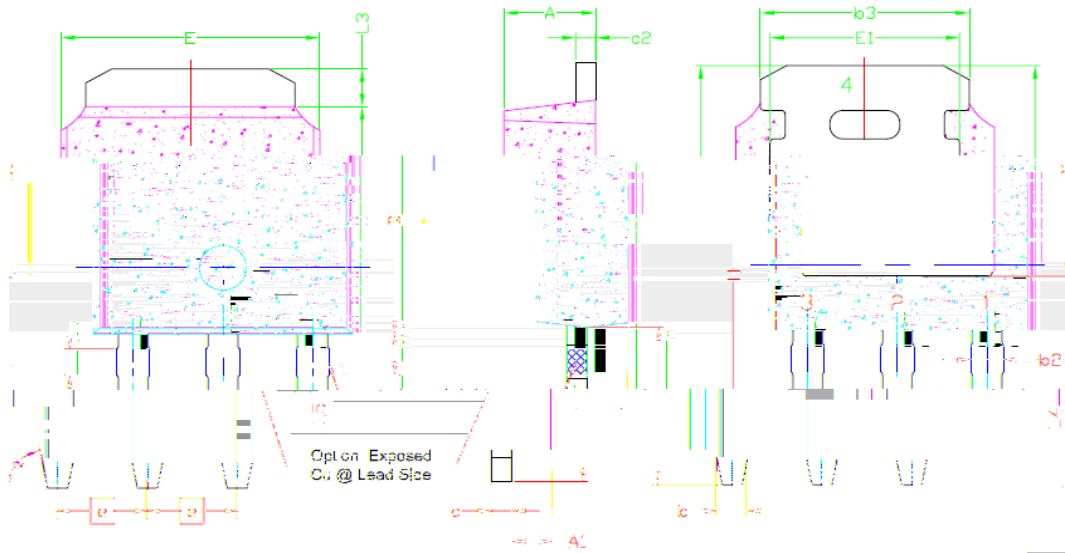


SYMBOL	DIMENSIONAL REQMS		
	MIN	NOM	MAX
E	6.40	6.60	6.731
L	1.40	1.52	1.77
L1	2.743 REF		
L2	0.508 BSC		
L3	0.89	--	1.27
L4	0.64	--	1.01
L5	--	--	--
D	6.00	6.10	6.223
H	3.90	4.00	4.05
W	0.64	0.75	0.85
W1	0.77	0.85	0.95
W2	1.27	1.35	1.45
W3	1.27	1.35	1.45
W4	1.27	1.35	1.45
W5	1.27	1.35	1.45
W6	1.27	1.35	1.45
W7	1.27	1.35	1.45
W8	1.27	1.35	1.45
W9	1.27	1.35	1.45
W10	1.27	1.35	1.45
W11	1.27	1.35	1.45
W12	1.27	1.35	1.45
W13	1.27	1.35	1.45
W14	1.27	1.35	1.45
W15	1.27	1.35	1.45
W16	1.27	1.35	1.45
W17	1.27	1.35	1.45
W18	1.27	1.35	1.45
W19	1.27	1.35	1.45
W20	1.27	1.35	1.45
W21	1.27	1.35	1.45
W22	1.27	1.35	1.45
W23	1.27	1.35	1.45
W24	1.27	1.35	1.45
W25	1.27	1.35	1.45
W26	1.27	1.35	1.45
W27	1.27	1.35	1.45
W28	1.27	1.35	1.45
W29	1.27	1.35	1.45
W30	1.27	1.35	1.45
W31	1.27	1.35	1.45
W32	1.27	1.35	1.45
W33	1.27	1.35	1.45
W34	1.27	1.35	1.45
W35	1.27	1.35	1.45
W36	1.27	1.35	1.45
W37	1.27	1.35	1.45
W38	1.27	1.35	1.45
W39	1.27	1.35	1.45
W40	1.27	1.35	1.45
W41	1.27	1.35	1.45
W42	1.27	1.35	1.45
W43	1.27	1.35	1.45
W44	1.27	1.35	1.45
W45	1.27	1.35	1.45
W46	1.27	1.35	1.45
W47	1.27	1.35	1.45
W48	1.27	1.35	1.45
W49	1.27	1.35	1.45
W50	1.27	1.35	1.45



Package Outline

TO-251, 3 leads



SYMBOL	DIMENSIONAL REQMTS		
	MIN	NOM	MAX
E	6.40	6.60	6.731
L	3.98	4.13	4.28
L3	0.89	--	1.27
L4	0.698 REF		
L5	0.972	1.099	1.226
D	6.00	6.10	6.223
H	11.05	11.25	11.45
b	0.64	0.76	0.88
b2	0.77	0.84	1.14
b3	5.21	5.34	5.46
e	2.286 BSC		
A	2.20	2.30	2.38
A1	0.89	1.04	1.15
c	0.46	0.50	0.60
c2	0.46	0.50	0.60
D1	5.10	--	--
E1	4.40	--	--
a	79° REF		