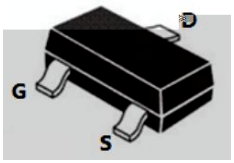
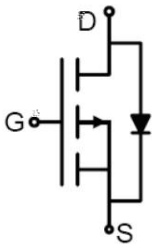
V_{DSS}	-30V
R_{DS}(on)	26.3mΩ (typ.)
I_D	-5.8A





Advanced MOSFET process technology
Special designed for PWM, load switching and general purpose applications
Ultra low on-resistance with low gate charge
Fast switching and reverse body recovery
150 operating temperature

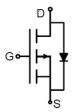
It utilizes the latest processing techniques to achieve the high cell density and reduces the on-resistance with high repetitive avalanche rating. These features combine to make this design an extremely efficient and reliable device for use in power switching application and a wide variety of other applications.

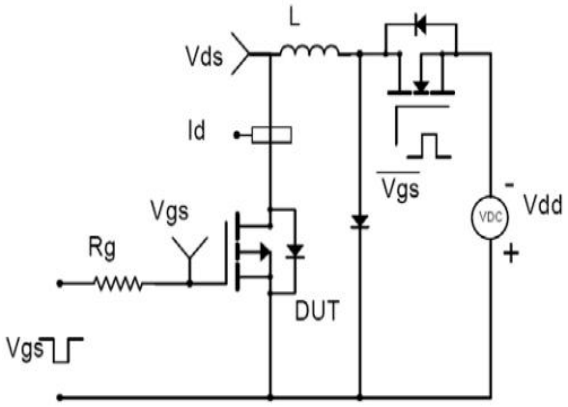
I_D @ T_C = 25°C	Continuous Drain Current, V_{GS} @ 10V	-5.8	A
I_D @ T_C = 100°C	Continuous Drain Current, V_{GS} @ 10V	-3.2	
I_{DM}	Pulsed Drain Current	-23	
P_D @T_C = 25°C	Power Dissipation	2.8	W
V_{DS}	Drain-Source Voltage	-30	V
V_{GS}	Gate-to-Source Voltage	± 20	V
T_J T_{STG}	Operating Junction and Storage Temperature Range	-55 to +150	°C

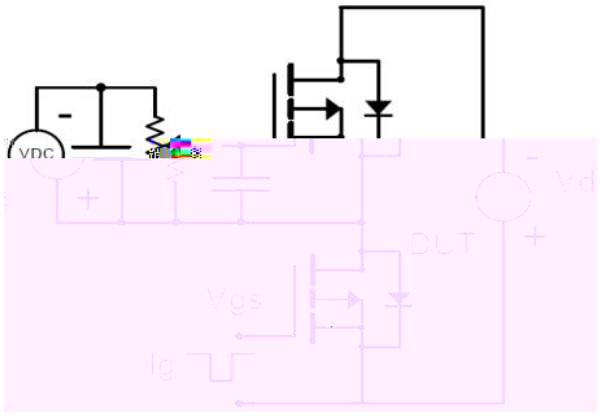
$R_{\theta JA}$	Junction-to-ambient (	—	80	/W

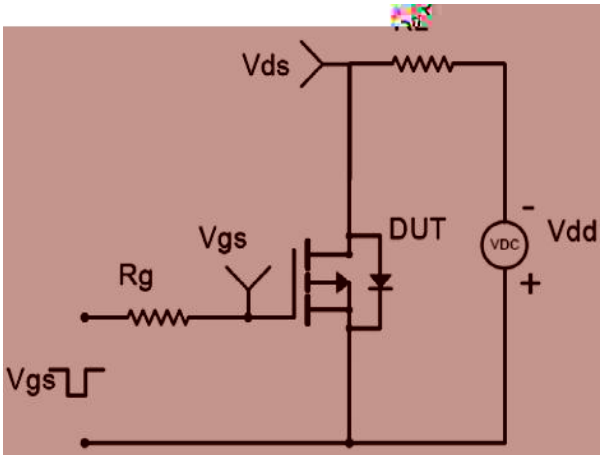
@T_A=25 unless otherwise specified

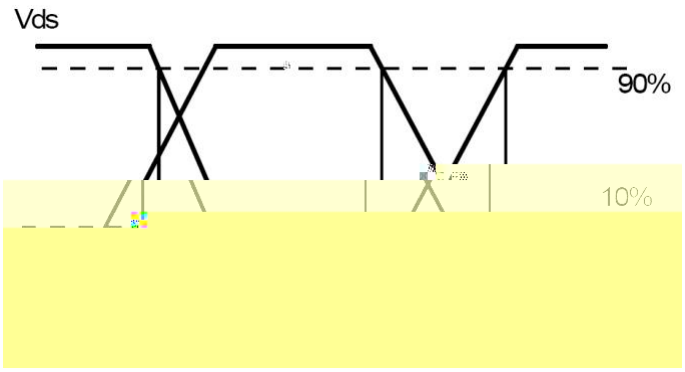
$V_{(BR)DSS}$	Drain-to-Source breakdown voltage	-30	—	—	V	V_{GS} = 0V, I_D = -250μA
$R_{DS(on)}$	Static Drain-to-Source on-resistance	—	26.3	34	mΩ	V_{GS}= -10V,I_D = -5.8A
		—	33.7	44.8		V_{GS}= -4.5V,I_D = -5A
$V_{GS(th)}$	Gate threshold voltage	-0.7	—	-1.5	V	V_{DS} = V_{GS}, I_D = -250μA
I_{DSS}	Drain-to-Source leakage current	—	—	-1	μA	V_{DS} = -30V,V_{GS} = 0V
I_{GSS}	Gate-to-Source forward leakage	—	—	100	nA	V_{GS} =20V
		—	—	-100		V_{GS} = -20V
C_{iss}	Input capacitance	—	521	—	pF	V_{GS} = 0V
C_{oss}	Output capacitance	—	101	—		V_{DS} = -15V
C_{rss}	Reverse transfer capacitance	—	66	—		f = 1MHz
Q_g	Total gate charge	—	9	—	nC	I_D = -5A,
Q_{gs}	Gate-to-Source charge	—	1.6	—		V_{DS}= -15V,
Q_{gd}	Gate-to-Drain("Miller") charge	—	2.2	—		V_{GS} = -10V
$t_{d(on)}$	Turn-on delay time	—	7.6	—	ns	V_{GS}= -10V, V_{DS} = -15V, R_{GEN}=6Ω,R_L=2.3Ω
t_r	Rise time	—	5.5	—		
$t_{d(off)}$	Turn-Off delay time	—	20	—		
t_f	Fall time	—	7	—		

I_S	Continuous Source Current (Body Diode)	—	—	-5.8	A	MOSFET symbol showing the integral reverse p-n junction diode. 
I_{SM}	Pulsed Source Current (Body Diode)	—	—	-23.2	A	
V_{SD}	Diode Forward Voltage	—	—	-1.2	V	I_S=-5.8A, V_{GS}=0V









Calculated continuous current based on maximum allowable junction temperature.
Repetitive rating; pulse width limited by max. junction temperature.
The power dissipation P_D is based on max. junction temperature, using junction-to-case thermal resistance.
The value of $R_{\theta JA}$ is measured with the device mounted on 1 in 2 FR-4 board with 2oz. Copper, in a still air environment with T_A =25°C

- Any and all Silikron products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your Silikron representative nearest