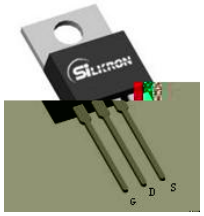
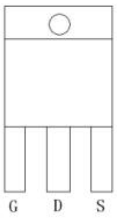
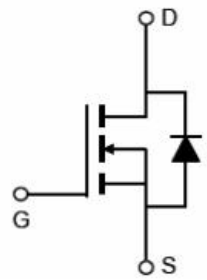
V_{DSS}	30V
R_{DS}(on)	1.95mΩ(typ.)
I_D	180A







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.

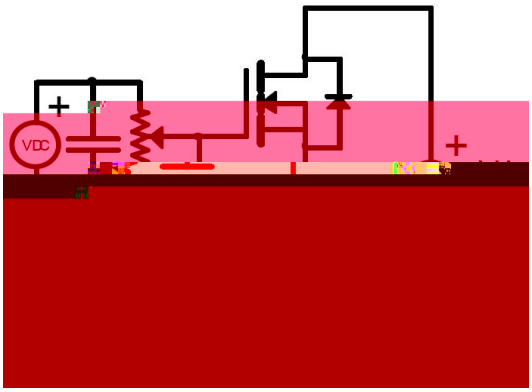
I_D @ TC = 25°C	Continuous Drain Current, V_{GS} @ 10V	180	A
I_{DM}	Pulsed Drain Current	720	
P_D @TC = 25°C	Power Dissipation	24	W
V_{DS}	Drain-Source Voltage	30	V
V_{GS}	Gate-to-Source Voltage	± 20	V
E_{AS}	Single Pulse Avalanche Energy @ L=0.5mH	324	mJ
T_J T_{STG}	Operating Junction and Storage Temperature Range	-55 to +150	°C

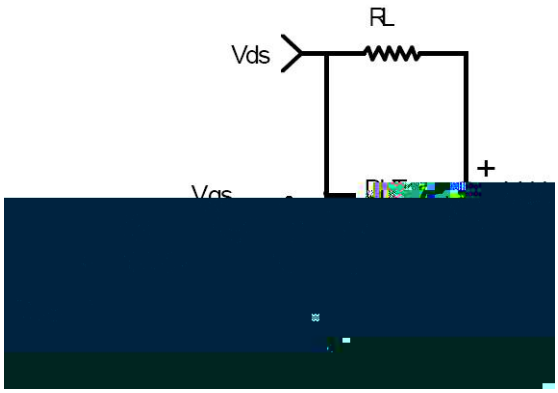
$R_{\theta JC}$	Junction-to-case	—	1.15	/W

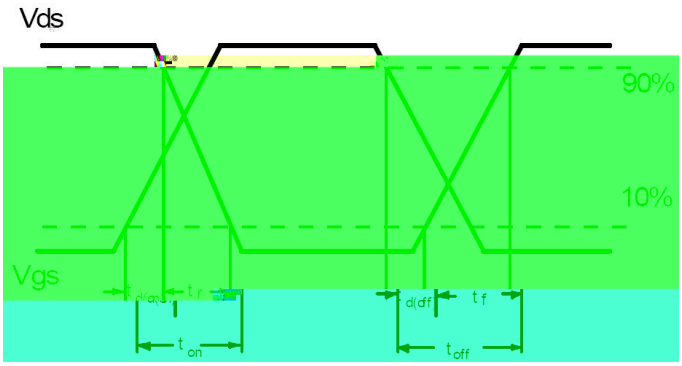
@T_A=25 unless otherwise specified

$V_{(BR)DSS}$	Drain-to-Source breakdown voltage	30	—	—	V	V_{GS} = 0V, I_D = 250μA
$R_{DS(on)}$	Static Drain-to-Source on-resistance	—	1.95	2.4	mΩ	V_{GS}=10V,I_D =30A
		—	3.5	5		V_{GS}=4.5V,I_D =20A
$V_{GS(th)}$	Gate threshold voltage	1	—	2.5	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
Q_g	Total gate charge	—	72	—	nC	I_D = 30A,
Q_{gs}	Gate-to-Source charge	—	11	—		V_{DS}=15V,
Q_{gd}	Gate-to-Drain("Miller") charge	—	15	—		V_{GS} = 10V
$t_{d(on)}$	Turn-on delay time	—	10.2	—	ns	V_{GS}=10V, V_{DS}=15V,
t_r	Rise time	—	6.4	—		R_{GEN}=3Ω
$t_{d(off)}$	Turn-Off delay time	—	75	—		I_D = 30A
t_f	Fall time	—	16	—		
C_{iss}	Input capacitance	—	4932	—	pF	V_{GS} = 0V
C_{oss}	Output capacitance	—	685	—		V_{DS} = 15V
C_{rss}	Reverse transfer capacitance	—	566	—		*f* = 1MHz

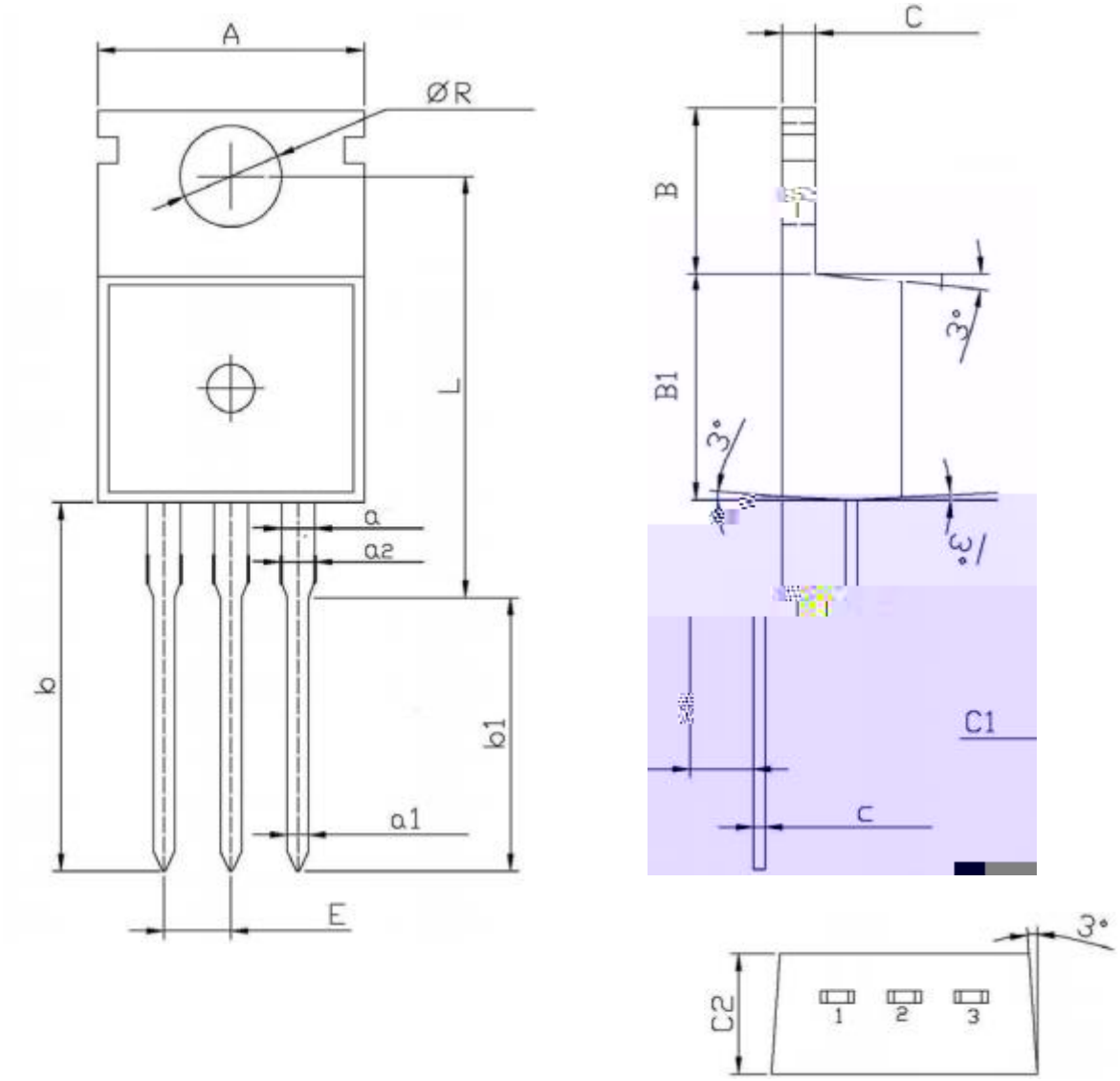
I_S	Continuous Source Current (Body Diode)	—	—	180	A	MOSFET symbol showing the integral reverse p-n junction diode.
I_{SM}	Pulsed Source Current (Body Diode)	—	—	720	A	
V_{SD}	Diode Forward Voltage	—	—	1.2	V	I_S=30A, V_{GS}=0V
trr	Reverse Recovery Time	—	30	—	ns	I_F=20A,di/dI







Calculated continuous current based on maximum allowable junction temperature.
Repetitive rating; pulse width limited by max. junction temperature.
The power dissipation PD is based on max. junction temperature, using junction-to-case thermal resistance.



Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	9.8	10.2	C	1.2	1.4
R	3.56	3.64	B	6.3	6.7
L	15.7	16.1	B1	9.0	9.4
b	12.6	13.6	C1	2.2	2.6
b1	9.6	10.6	a1	0.7	0.9
a	1.22	1.32	c	0.4	0.6
E	2.34	2.74	C2	4.3	4.7
a2	1.25	1.45			

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