

2SK4201-VB Datasheet N-Channel 100-V (D-S) 175 °C MOSFET

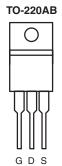
PRODUCT SUMMARY					
V _{DS} (V)	100				
$R_{DS(on)} (\Omega)$ at $V_{GS} = 10 V$	0.009				
$R_{DS(on)} (\Omega)$ at $V_{GS} = 4.5 V$	0. 020				
I _D (A)	100				
Configuration	Single				

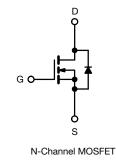
FEATURES

• TrenchFET[®] Power MOSFET



175 °C Maximum Junction Temperature
Compliant to RoHS Directive 2002/95/EC





ABSOLUTE MAXIMUM RATINGS $T_A = 25 \degree C$, unless otherwise noted					
Parameter			Limit	Unit	
Drain-Source Voltage			100	V	
Gate-Source Voltage			± 20	v	
Continuous Drain Current (T _J = 150 °C)	T _C = 25 °C	I _D	100		
	T _C = 125 °C	U	75 ^a	А	
Pulsed Drain Current	I _{DM}	300	A		
Avalanche Current		I _{AS}	75		
L = 0.1 min		E _{AS}	280	mJ	
Maria Para Distinction	T_{C} = 25 °C (TO-220AB and TO-263)	PD	250 ^c	W	
Maximum Power Dissipation ^b	T _A = 25 °C (TO-263) ^d	۰D	3.75	vv	
Operating Junction and Storage Temperat	T _J , T _{stg}	- 55 to 175	°C		

THERMAL RESISTANCE RATINGS					
Parameter		Symbol	Limit	Unit	
Junction-to-Ambient	PCB Mount (TO-263) ^d	R _{thJA}	40		
Junction-to-Ambient	Free Air (TO-220AB)		62.5	°C/W	
Junction-to-Case		R _{thJC}	0.6		

Notes:

a. Pulse test; pulse width \leq 300 µs, duty cycle \leq 2 %.

b. Guaranteed by design, not subject to production testing.

c. Independent of operating temperature.

Stresses beyond those listed under "Absolute Maximum Ratings" may cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated in the operational sections of the specifications is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

Static N </th <th></th> <th></th> <th></th> <th></th> <th></th> <th>ww</th> <th>N.VBse</th>						ww	N.VBse
$\begin{array}{ c c c c } \hline Parameter & Symbol & Test Conditions & Min. Typ. Max. Uni \\ \hline Static \\ \hline Drain-Source Breakdown Voltage & V_{DS} & V_{DS} = 0 V, I_D = 250 \ \mu A & 100 & 4 & V \\ \hline Gate-Threshold Voltage & V_{DS} & V_{DS} = 0 V, V_{DS} = V_{DS} \ I_D = 250 \ \mu A & 2 & 4 & V \\ \hline Gate-Body Leakage & I_{DS} & V_{DS} = 0 V, V_{DS} = 250 \ \mu A & 2 & 4 & V \\ \hline Gate-Body Leakage & I_{DS} & V_{DS} = 0 V, V_{DS} = 20 V & 1 & 1 & V \\ \hline Gate-Body Leakage & I_{DS} & V_{DS} = 100 \ V, V_{DS} = 0 V & V_{DS} = 100 \ V, V_{DS} = 0 V, V_{DS} = 100 \ V, V_{DS} = 0 V \ V_{DS} = 100 \ V, V_{DS} = 0 V \ V_{DS} = 100 \ V, V_{DS} = 0 V \ V_{DS} = 100 \ V, V_$							
$\begin{array}{ c c c c } \hline Parameter & Symbol & Test Conditions & Min. Typ. Max. Uni \\ \hline Static \\ \hline Drain-Source Breakdown Voltage & V_{DS} & V_{DS} = 0 V, I_D = 250 \ \mu A & 100 & 4 & V \\ \hline Gate-Threshold Voltage & V_{GS}(m) & V_{DS} = V_{GS}, I_D = 250 \ \mu A & 2 & 4 & V \\ \hline Gate-Body Leakage & I_{GS} & V_{DS} = 0 V, V_{QS} = 420 V & 4 & 100 & nA \\ \hline Cate-Body Leakage & I_{GS} & V_{DS} = 0 V, V_{GS} = 20 V & 5 & 11 & V_{DS} \\ \hline Cate-Body Leakage & I_{GS} & V_{DS} = 100 V, V_{GS} = 0 V & 1 & 11 & V_{DS} \\ \hline Cate-Body Leakage & I_{GS} & V_{DS} = 100 V, V_{GS} = 0 V & 120 & 11 & V_{DS} \\ \hline Cate-Body Leakage & I_{D(m)} & V_{DS} = 100 V, V_{GS} = 0 V & 1 & 15 & 0 & V_{DS} \\ \hline Cate-Body Leakage Drain Current & I_{D(m)} & V_{DS} = 25 V, V_{GS} = 10 V & 120 & A & 0.009 & V_{DS} = 100 V, V_{GS} = 0 V, T_J = 175 \ C & 0.023 & V_{GS} = 10 V, I_D = 30 A & 0.020 & V_{GS} = 10 V, I_D = 30 A & 0.020 & V_{GS} = 10 V, I_D = 30 A & 0.020 & V_{GS} = 10 V, I_D = 30 A , T_J = 125 \ \hline C & 0.023 & V_{GS} = 10 V, I_D = 30 A , T_J = 125 \ \hline C & 0.023 & V_{GS} = 10 V, I_D = 30 A , T_J = 125 \ \hline C & 0.023 & V_{GS} = 10 V, I_D = 30 A & 25 & V_{CS} & S & S \\ \hline Dynamic^b & V_{DS} = 10 V, V_{DS} = 25 V, I = 1 \ MHz & 665 & 10 & V_{CS} & 0 & V_{DS} & 10 & $	SPECIFICATIONS T _{.1} = 25 °C	, unless othe	rwise noted				
$\begin{array}{ c c c c } \hline Drain-Source Breakdown Voltage V_{DS} $V_{DS} = 0 V, I_D = 250 μA$ 100 $$10$ $$$$$$$$$$$$$$$$$$$$$$$$$	-			Min.	Тур.	Max.	Unit
$ \begin{array}{ c c c c } \hline \mbox{Gate-Threshold Voltage} & V_{GS(th)} & V_{DS} = V_{GS}, b_{p} = 250 \ \mu A & 2 & 4 & 4 \\ \hline \mbox{Gate-Body Leakage} & l_{GSS} & V_{DS} = 0 \ V, \ V_{GS} = 20 \ V & 50 & \pm 100 & 0 & 0 \\ \hline \mbox{V}_{DS} = 100 \ V, \ V_{GS} = 0 \ V & 1 & 1 & 0 & 0 & 0 \\ \hline \mbox{V}_{DS} = 100 \ V, \ V_{GS} = 0 \ V & 1 & 1 & 0 & 0 & 0 \\ \hline \mbox{V}_{DS} = 100 \ V, \ V_{GS} = 0 \ V, \ T_{J} = 125 \ ^{\circ}C & 50 & 0 & 0 & 0 & 0 \\ \hline \mbox{V}_{DS} = 100 \ V, \ V_{GS} = 0 \ V, \ T_{J} = 125 \ ^{\circ}C & 50 & 0 & 0 & 0 & 0 \\ \hline \mbox{V}_{DS} = 100 \ V, \ V_{GS} = 0 \ V, \ T_{J} = 125 \ ^{\circ}C & 50 & 0 & 0 & 0 & 0 & 0 \\ \hline \mbox{V}_{DS} = 100 \ V, \ V_{GS} = 10 \ V, \ T_{J} = 125 \ ^{\circ}C & 0 & 0.009 & 0 & 0 & 0 \\ \hline \mbox{V}_{GS} = 10 \ V, \ T_{D} = 30 \ A \ T_{J} = 125 \ ^{\circ}C & 0 & 0.023 & 0 & 0 & 0 \\ \hline \mbox{V}_{GS} = 10 \ V, \ T_{D} = 30 \ A \ T_{J} = 125 \ ^{\circ}C & 0 & 0.023 & 0 & 0 \\ \hline \mbox{V}_{GS} = 10 \ V, \ T_{D} = 30 \ A \ T_{J} = 125 \ ^{\circ}C & 0 & 0.023 & 0 & 0 \\ \hline \mbox{V}_{GS} = 10 \ V, \ T_{D} = 30 \ A \ T_{J} = 125 \ ^{\circ}C & 0 & 0.030 & 0 & 0 \\ \hline \mbox{V}_{GS} = 10 \ V, \ T_{D} = 30 \ A \ T_{J} = 175 \ ^{\circ}C & 0 & 0.030 & 0 & 0 \\ \hline \mbox{V}_{GS} = 10 \ V, \ T_{D} = 30 \ A \ T_{J} = 175 \ ^{\circ}C & 0 & 0.030 & 0 & 0 \\ \hline \mbox{V}_{GS} = 10 \ V, \ T_{D} = 30 \ A \ T_{J} = 175 \ ^{\circ}C & 0 & 0.030 & 0 & 0 \\ \hline \mbox{V}_{GS} = 10 \ V, \ T_{D} = 30 \ A \ T_{J} = 175 \ ^{\circ}C & 0 & 0.030 & 0 & 0 \\ \hline \mbox{Uput Capacitance} \ \mbox{C}_{Gas} & V_{GS} = 0 \ V, \ V_{DS} = 25 \ V, \ f = 1 \ MHz & 665 & 0 & 0 & 0 \\ \hline \mbox{Gate-Charge}^{\circ} \ \ \mbox{Q}_{gg} & & 0 \ V_{DS} = 50 \ V, \ V_{DS} = 10 \ V, \ T_{D} = 85 \ A \ 177 \ \ \mbox{In} & 0 & 0 \\ \hline \mbox{Gate-Drain Charge}^{\circ} \ \ \ \mbox{Q}_{gg} & & 0 \ V_{DS} = 50 \ V, \ V_{DS} = 10 \ V, \ T_{D} = 85 \ A \ 177 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	Static				1		
$ \begin{array}{ c c c } \hline \mbox{Gate-Threshold Voltage} & V_{GS(th)} & V_{DS} = V_{GS}, t_{D} = 250\mu A & 2 & 4 \\ \hline \mbox{Gate-Body Leakage} & l_{GSS} & V_{DS} = 0, V, V_{GS} = 20V & 0 & 1 & 1 \\ \hline \mbox{Jerror Gate Voltage Drain Current} & P_{DS} & V_{DS} = 100V, V_{GS} = 0V & 0 & 1 & 1 \\ \hline \mbox{Jerror Gate Voltage Drain Current} & P_{DS} & 100V, V_{GS} = 0V, T_{J} = 125^{\circ}C & 0 & 250 \\ \hline \mbox{Jess 100}V, V_{GS} = 0V, T_{J} = 125^{\circ}C & 0 & 250 \\ \hline \mbox{Jess 100}V, V_{GS} = 0V, T_{J} = 125^{\circ}C & 0 & 0.009 & 0 & 0 \\ \hline \mbox{Jess 10}V, V_{DS} = 100V, V_{DS} = 100V, V_{DS} = 100V & 120 & 0 & 0 & 0 \\ \hline \mbox{Jess 10}V, V_{DS} = 10V, V_{DS} = 10V, V_{DS} = 10V, I_{D} = 30A & 0.0020 & 0 & 0 \\ \hline \mbox{Jess 10}V, V_{DS} = 10V, I_{D} = 30A, T_{J} = 125^{\circ}C & 0.023 & 0 & 0 \\ \hline \mbox{Jess 10}V, V_{DS} = 10V, I_{D} = 30A, T_{J} = 125^{\circ}C & 0.023 & 0 & 0 \\ \hline \mbox{Jess 10}V, V_{DS} = 10V, I_{D} = 30A, T_{J} = 125^{\circ}C & 0.023 & 0 & 0 \\ \hline \mbox{Jess 10}V, I_{D} = 30A, T_{J} = 125^{\circ}C & 0.023 & 0 & 0 \\ \hline \mbox{Jess 10}V, I_{D} = 30A, T_{J} = 125^{\circ}C & 0.023 & 0 & 0 \\ \hline \mbox{Jess 10}V, I_{D} = 30A, T_{J} = 125^{\circ}C & 0.023 & 0 & 0 \\ \hline \mbox{Jess 10}V, I_{D} = 30A, T_{J} = 125^{\circ}C & 0.023 & 0 & 0 \\ \hline \mbox{Jess 10}V, I_{D} = 30A, T_{J} = 125^{\circ}C & 0.023 & 0 & 0 \\ \hline \mbox{Jess 10}V, I_{D} = 30A, T_{J} = 125^{\circ}C & 0.023 & 0 & 0 \\ \hline \mbox{Jess 10}V, I_{D} = 30A, T_{J} = 175^{\circ}C & 0.030 & 0 & 0 \\ \hline \mbox{Jess 10}V, I_{D} = 30A, T_{J} = 175^{\circ}C & 0.023 & 0 & 0 \\ \hline \mbox{Jess 10}V, I_{D} = 50V, V_{DS} = 25V, f = 1MHz & 6665 & 0 & 0 \\ \hline \mbox{Jess 10}V_{DS} = 50V, V_{DS} = 10V, I_{D} = 85A & 177 & 0 & 0 \\ \hline \mbox{Jess 10}V_{DS} = 50V, V_{DS} = 10V, I_{D} = 85A & 177 & 0 & 0 \\ \hline \mbox{Jess 10}V, I_{D} = 85A, V_{OD} = 50V, R_{L} = 0.6\Omega & 0 & 135 & 0 \\ \hline \mbox{Jess 10}V_{DS} = 50V, R_{L} = 0.6\Omega & 0 & 0 & 135 & 0 \\ \hline \mbox{Jess 10}V_{DS} = 50V, R_{L} = 0.6\Omega & 0 & 0 & 135 & 0 \\ \hline \mbox{Jess 10}V_{DS} = 55V, V_{DS} = 10V, R_{g} = 2.5\Omega & 0 & 130 & 0 \\ \hline \$	Drain-Source Breakdown Voltage	V _{DS}	$V_{GS} = 0 V, I_D = 250 \mu A$	100			- v
$ \begin{tabular}{ c c c c } \hline Gate-Body Leakage & I_{GSS} & V_{DS} = 0 V, V_{GS} = \pm 20 V & & & & \pm 100 & nA \\ \hline V_{DS} = 100 V, V_{GS} = 0 V & & & & 1 & \\ \hline V_{DS} = 100 V, V_{GS} = 0 V & & & & 1 & \\ \hline V_{DS} = 100 V, V_{GS} = 0 V, T_J = 125 \ ^{\circ}C & & & & & 50 & \\ \hline V_{DS} = 100 V, V_{GS} = 0 V, T_J = 175 \ ^{\circ}C & & & & & & 250 & \\ \hline On-State Drain Current^a & I_{D(on)} & V_{DS} = 25 V, V_{GS} = 10 V & 120 & & & & A & \\ \hline V_{GS} = 10 V, I_D = 30 A & & & 0.009 & & \\ \hline V_{GS} = 10 V, I_D = 30 A & & & 0.020 & & \\ \hline V_{GS} = 10 V, I_D = 30 A, T_J = 125 \ ^{\circ}C & & & 0.023 & & \\ \hline V_{GS} = 10 V, I_D = 30 A, T_J = 125 \ ^{\circ}C & & & 0.023 & & \\ \hline V_{GS} = 10 V, I_D = 30 A, T_J = 125 \ ^{\circ}C & & & 0.030 & & \\ \hline V_{GS} = 10 V, I_D = 30 A, T_J = 175 \ ^{\circ}C & & 0.030 & & \\ \hline Dynamic^b & & & & & & \\ \hline Dynamic^b & & & & & & & \\ \hline Dynamic^b & & & & & & & & \\ \hline Dut Capacitance & C_{iss} & & & & & & & & \\ Output Capacitance & C_{iss} & & & & & & & & & \\ Output Capacitance & C_{rss} & & & & & & & & & & & \\ \hline Total Gate Charge^c & Q_g & & & & & & & & & & & & & & \\ \hline Total Gate Charge^c & Q_{gd} & & & & & & & & & & & & & & & & & \\ \hline Turn-On Delay Time^c & It_{d(on)} & & & & & & & & & & & & & & & & & \\ Rise Time^c & t_r & & & & & & & & & & & & & & & & & & &$	Gate-Threshold Voltage	V _{GS(th)}	$V_{DS} = V_{GS}$, $I_D = 250 \ \mu A$	2		4	
$ \begin{array}{ c c c c c } \hline \mbox{Volage Drain Current} & \mbox{I}_{DSS} & \hline \mbox{Volage 0 V, T_J = 125 °C} & \mbox{I}_J = 175 °C} & \mbox{I}_J = 120 & \mbox{I}_J = 125 °C} & \mbox{I}_J = 120 °C & \mb$	Gate-Body Leakage	I _{GSS}	$V_{DS} = 0 V, V_{GS} = \pm 20 V$			± 100	nA
$\begin{tabular}{ c c c c } \hline V_{DS} = 100 V, V_{GS} = 0 V, J_{J} = 175 °C & $$ 0$ 250 \\ \hline V_{DS} = $$ 5 V, V_{GS} = 10 V & $$ 120 & $$ 120 & $$ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$ $$			$V_{DS} = 100 \text{ V}, V_{GS} = 0 \text{ V}$			1	μΑ
$ \begin{array}{ c c c c c } \hline On-State Drain Current^a & _{D(on)} & V_{DS} = 5 \ V, \ V_{GS} = 10 \ V & 120 & A \\ \hline V_{GS} = 10 \ V, \ I_{D} = 30 \ A & 0.009 & A \\ \hline V_{GS} = 4.5 \ V, \ I_{D} = 20 \ A & 0.020 & A \\ \hline V_{GS} = 10 \ V, \ I_{D} = 30 \ A, \ T_{J} = 125 \ ^{\circ}C & 0.023 & A \\ \hline V_{GS} = 10 \ V, \ I_{D} = 30 \ A, \ T_{J} = 125 \ ^{\circ}C & 0.030 & A \\ \hline V_{GS} = 10 \ V, \ I_{D} = 30 \ A, \ T_{J} = 125 \ ^{\circ}C & 0.030 & A \\ \hline V_{GS} = 10 \ V, \ I_{D} = 30 \ A, \ T_{J} = 125 \ ^{\circ}C & 0.030 & A \\ \hline V_{GS} = 10 \ V, \ I_{D} = 30 \ A, \ T_{J} = 125 \ ^{\circ}C & 0.030 & A \\ \hline P \\ P \\$	Zero Gate Voltage Drain Current	I _{DSS}	V_{DS} = 100 V, V_{GS} = 0 V, T_{J} = 125 °C			50	
$ \begin{array}{ c c c c c c c c } \hline Partial Part$			V_{DS} = 100 V, V_{GS} = 0 V, T_{J} = 175 °C			250	
$ \begin{array}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline & V_{GS} = 4.5 \ V, \ I \ D = 20 \ A & 0.020 & 0.023 & 0.02$	On-State Drain Current ^a	I _{D(on)}	V_{DS} = \geq 5 V, V_{GS} = 10 V	120			А
$ \begin{array}{ c c c c c c c } \hline Drain-Source On-State Resistance^a & P_{DS}(on) & V_{GS} = 10 \ V, \ I_D = 30 \ A, \ T_J = 125 \ ^{\circ}C & 0.023$			$V_{GS} = 10 \text{ V}, \text{ I}_{D} = 30 \text{ A}$		0.009		
$ \begin{array}{ c c c c c c c } \hline V_{GS} = 10 \ V, \ I_D = 30 \ A, \ I_J = 125 \ C & 0.023 & 0.023 & 0.000 & 0.0$		Б	$V_{GS} = 4.5 \text{ V}, \text{ I}_{D} = 20 \text{ A}$		0.020		Ω
$\begin{array}{ c c c c c } \hline Forward Transconductance^{a} & g_{fs} & V_{DS} = 15 \ V, \ I_{D} = 30 \ A & 25 & & & & S \\ \hline \hline Dynamic^{b} & & & & & & & & & & & & & & & & & & &$	Drain-Source On-State Resistance ^a	H _{DS(on)}	V_{GS} = 10 V, I _D = 30 A, T _J = 125 °C		0.023		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			V_{GS} = 10 V, I _D = 30 A, T _J = 175 °C		0.030		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Forward Transconductance ^a	9 _{fs}	V _{DS} = 15 V, I _D = 30 A	25			S
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Dynamic ^b						
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Input Capacitance	C _{iss}			4700		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Output Capacitance	C _{oss}	V_{GS} = 0 V, V_{DS} = 25 V, f = 1 MHz		665		pF
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Reverse Transfer Capacitance	C _{rss}			265		1
$ \begin{array}{c c c c c c c c } \hline Gate-Drain Charge^{C} & Q_{gd} & & & & & & & & & & \\ \hline Gate-Drain Charge^{C} & Q_{gd} & & & & & & & & & \\ \hline Turn-On Delay Time^{C} & t_{d(on)} & & & & & & & & & & & & \\ \hline Rise Time^{C} & t_{r} & & & & & & & & & & & & & & & \\ \hline Turn-Off DelayTime^{C} & t_{d(off)} & & & & & & & & & & & & & & & & \\ \hline Fall Time^{C} & t_{f} & & & & & & & & & & & & & & & & & & &$	Total Gate Charge ^c	Qg			105	160	
$\begin{tabular}{ c c c c c c } \hline Turn-On Delay Time^{C} & t_{d(on)} & & & & & & & & & & & & & & & & & & &$	Gate-Source Charge ^c	Q _{gs}	$V_{DS} = 50$ V, $V_{GS} = 10$ V, $I_{D} = 85$ A		17		nC
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Gate-Drain Charge ^c	Q _{gd}			23		1
$\begin{tabular}{ c c c c c c c } \hline Turn-Off DelayTime^{C} & t_{d(off)} & I_D \cong 85 \mbox{ A}, V_{GEN} = 10 \mbox{ V}, R_g = 2.5 \Omega & 55 & 85 & 130 & 195 & 130 & 130 & 195 & 130 $	Turn-On Delay Time ^c	t _{d(on)}			12	25	
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Rise Time ^c	t _r	55 -		90	135	20
Source-Drain Diode Ratings and Characteristics T _C = 25 °C ^b Continuous Current I _S 85 A	Turn-Off DelayTime ^c	t _{d(off)}			55	85	ns -
Continuous Current Is 85 A	Fall Time ^c	t _f			130	195	
A	Source-Drain Diode Ratings and Chara	acteristics T _C =	= 25 °C ^b				
	Continuous Current	۱ _S			85	^	
	Pulsed Current	I _{SM}				240	А
Forward Voltage ^a V _{SD} I _F = 85 A, V _{GS} = 0 V 1.0 1.5 V	Forward Voltage ^a	V _{SD}	I _F = 85 A, V _{GS} = 0 V		1.0	1.5	V
Reverse Recovery Time t _{rr} 85 140 ns	Reverse Recovery Time	t _{rr}			85	140	ns
Peak Reverse Recovery CurrentIRM(REC)IF = 50 A, dl/dt = 100 A/ μ s4.57A	Peak Reverse Recovery Current	I _{RM(REC)}	I _F = 50 A, dl/dt = 100 A/μs		4.5	7	А
Reverse Recovery ChargeQP0.170.35μC	Reverse Recovery Charge	Q _{rr}			0.17	0.35	μC

Notes:

a. Pulse test; pulse width \leq 300 $\mu s,$ duty cycle \leq 2 %.

b. Guaranteed by design, not subject to production testing.

c. Independent of operating temperature.

Stresses beyond those listed under "Absolute Maximum Ratings" may cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated in the operational sections of the specifications is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

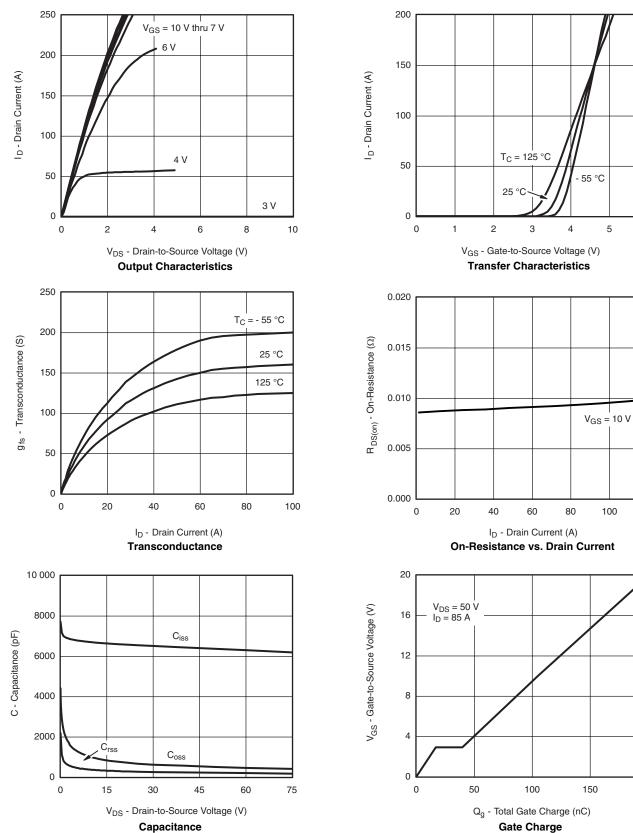
Bsemi



6

120

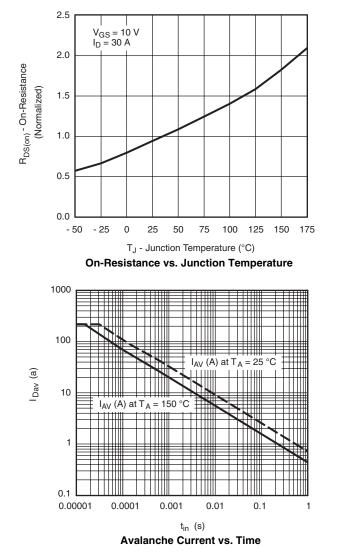
TYPICAL CHARACTERISTICS $T_A = 25 \text{ °C}$, unless otherwise noted

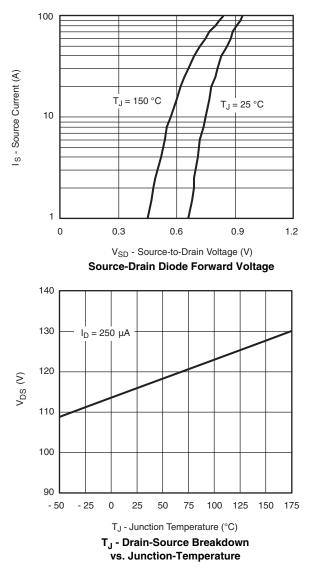


200



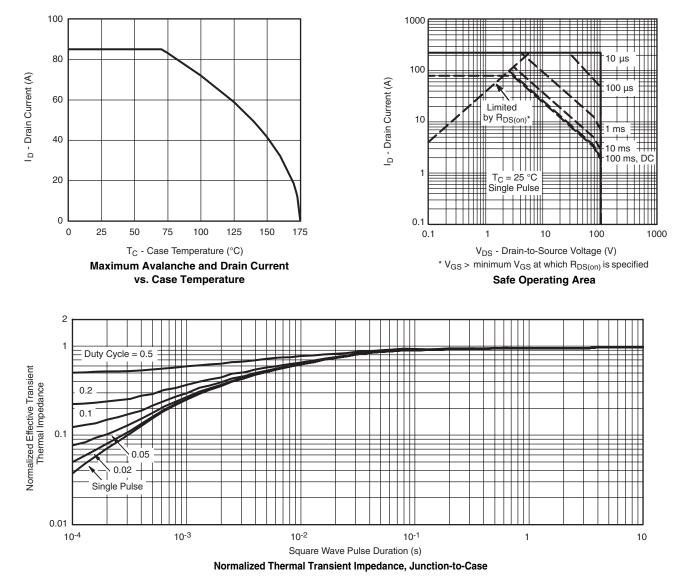
TYPICAL CHARACTERISTICS $T_A = 25 \text{ °C}$, unless otherwise noted





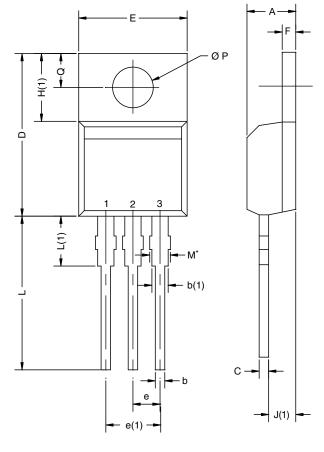


THERMAL RATINGS





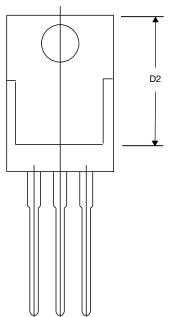
TO-220AB



	MILLIN	IETERS	INCHES			
DIM.	MIN.	MAX.	MIN.	MAX.		
А	4.25	4.65	0.167	0.183		
b	0.69	1.01	0.027	0.040		
b(1)	1.20	1.73	0.047	0.068		
С	0.36	0.61	0.014	0.024		
D	14.85	15.49	0.585	0.610		
D2	12.19	12.70	0.480	0.500		
E	10.04	10.51	0.395	0.414		
е	2.41	2.67	0.095	0.105		
e(1)	4.88	5.28	0.192	0.208		
F	1.14	1.40	0.045	0.055		
H(1) 6.09 6.48 0.240 0.255						
J(1)	2.41	2.92	0.095	0.115		
L	13.35	14.02	0.526	0.552		
L(1)	3.32	3.82	0.131	0.150		
ØР	3.54	3.94	0.139	0.155		
Q	2.60	3.00	0.102	0.118		
ECN: T14-0413-Rev. P, 16-Jun-14 DWG: 5471						

Note

* M = 1.32 mm to 1.62 mm (dimension including protrusion) Heatsink hole for HVM





Disclaimer

All products due to improve reliability, function or design or for other reasons, product specifications and data are subject to change without notice.

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