

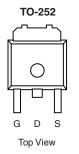
N-Channel 60-V (D-S) MOSFET

PRODUCT	SUMMARY	
V _{DS} (V)	r _{DS(on)} (Ω)	I _D (A) ^a
60	0.025 at V _{GS} = 10 V	45
30	0.030 at V _{GS} = 4.5 V	40

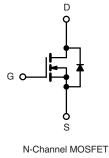
FEATURES

- TrenchFET[®] Power MOSFET
- 175 °C Junction Temperature





Drain Connected to Tab



ABSOLUTE MAXIMUM RATINGS T_C =	25 °C, unless othe	rwise noted		
Parameter		Symbol	Limit	Unit
Gate-Source Voltage	V _{GS}	± 20	V	
Continuous Drain Current (T, = 175 °C) ^b	T _C = 25 °C	1-	45	
Continuous Drain Current $(T_J = 175^{\circ}C)^2$	T _C = 100 °C		35	
Pulsed Drain Current		I _{DM}	100	A
Continuous Source Current (Diode Conduction)		۱ _S	23	
Avalanche Current		I _{AS}	20	
Single Avalanche Energy (Duty Cycle \leq 1 %)	L = 0.1 mH	E _{AS}	20	mJ
Maximum Dawar Dissinction	T _C = 25 °C	D_	100	\A/
Maximum Power Dissipation	T _A = 25 °C	• P _D –	3 ^a	W
Operating Junction and Storage Temperature Range		T _{.I} , T _{sta}	- 55 to 175	°C

THERMAL RESISTANCE RATINGS					
Parameter		Symbol	Typical	Maximum	Unit
Maximum Junction-to-Ambient ^a	$t \le 10 \text{ sec}$	R _{thJA}	18	22	
Maximum Junction-to-Ambient*	Steady State	''thJA	40	50	°C/W
Maximum Junction-to-Case		R _{thJC}	3.2	4	

Notes:

a. Surface Mounted on 1" x 1" FR4 board, t \leq 10 sec.

<table-container><table-row><math><table-row>ParameterSymbolTest ConditionsMinTypeMaxStateGate Threshold Voltage$V_{(BR)}$$V_{GS} = 0, V_1 = 250, \mu$6.0Gate Threshold Voltage$V_{GS}$$V_{GS} = 0, V_{GS} = 250, \mu$1.02.0Gate Threshold Voltage$I_{GS}$$V_{DS} = 0, V_{GS} = 20, V$Gate Body Leakage$I_{GS}$$V_{DS} = 60, V_{GS} = 0, V_1 = 152, C$Zero Gate Voltage Drain Current$I_{DS}$$V_{DS} = 60, V_{GS} = 0, V_1 = 152, C$On-State Drain Current^{ID}$I_{D(m)}$$V_{DS} = 50, V_{GS} = 10, V_1 = 152, C$</table-row></math></table-row></table-container>	SPECIFICATIONS $T_J = 25$	°C, unless o	otherwise noted		_		
$ \begin{array}{ c c c c } \hline \begin{tabular}{ c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c c c } \hline \begin{tabular}{ c c c c } \hline \begin{tabular}{ c c c c c c } \hline \begin{tabular}{ c c c c c c c } \hline \begin{tabular}{ c c c c c c c c } \hline \begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	Parameter	Symbol	Test Conditions	Min	Тур ^а	Max	Unit
$ \begin{array}{c c c c c c } \hline \mbox{Gate Threshold Voltage} & V_{GS(th)} & V_{DS} = V_{GS}, I_D = 250 \ \mu \mbox{A} & 1.0 & 2.0 & 3.0 \\ \hline \mbox{Gate Body Leakage} & I_{GSS} & V_{DS} = 0 \ V, V_{GS} = 20 \ V & U_{SS} = 0 \ V, V_{GS} = 0 \ V, V_{GS} = 0 \ V, V_{GS} = 0 \ V, U_{SS} = 0 \ V, V_{GS} = 0 \ V, U_{SS} = 0 $	Static			•			
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Drain-Source Breakdown Voltage	V _{(BR)DSS}	V_{GS} = 0 V, I_D = 250 μ A	60			V
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Gate Threshold Voltage	V _{GS(th)}	$V_{DS} = V_{GS}$, $I_D = 250 \ \mu A$	1.0	2.0	3.0	v
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Gate-Body Leakage	I _{GSS}	$V_{DS} = 0 V, V_{GS} = \pm 20 V$			± 100	nA
$ \begin{array}{ c c c c c c } \hline V_{DS} = 60 \ V, \ V_{GS} = 0 \ V, \ U_{J} = 175 \ ^{\circ}C & 0 & 250 \\ \hline V_{DS} = 5 \ V, \ V_{GS} = 10 \ V & 50 & 0 & 0 \\ \hline V_{GS} = 10 \ V, \ U_{D} = 15 \ A & 0.025 & 0 \\ \hline V_{GS} = 10 \ V, \ U_{D} = 15 \ A & 0.025 & 0 \\ \hline V_{GS} = 10 \ V, \ U_{D} = 15 \ A & 0.025 & 0 \\ \hline V_{GS} = 10 \ V, \ U_{D} = 15 \ A & 0.030 & 0 \\ \hline V_{GS} = 10 \ V, \ U_{D} = 15 \ A & 0.030 & 0 \\ \hline V_{GS} = 10 \ V, \ U_{D} = 15 \ A & 0.030 & 0 \\ \hline V_{GS} = 10 \ V, \ U_{D} = 15 \ A & 0.030 & 0 \\ \hline V_{GS} = 10 \ V, \ U_{D} = 15 \ A & 0.030 & 0 \\ \hline V_{GS} = 10 \ V, \ U_{D} = 15 \ A & 0.030 & 0 \\ \hline \hline V_{GS} = 10 \ V, \ U_{D} = 15 \ A & 0.030 & 0 \\ \hline \hline Dynamic^8 & V_{DS} = 15 \ V, \ U_{D} = 10 \ A & 0.030 & 0 \\ \hline \hline Dynamic^8 & V_{DS} = 15 \ V, \ U_{D} = 15 \ A & 0.030 & 0 \\ \hline \hline Dutput \ Capacitance & C_{1SS} & V_{GS} = 0 \ V, \ V_{DS} = 25 \ V, \ f = 1 \ MHz & 140 & 0 \\ \hline \hline Dutput \ Capacitance & C_{rss} & V_{GS} = 0 \ V, \ V_{DS} = 25 \ V, \ f = 1 \ MHz & 140 & 0 \\ \hline \hline Cotal \ Gate \ Charge^C & Q_{g} & V_{DS} = 30 \ V, \ V_{DS} = 30 \ V, \ V_{DS} = 23 \ A, \ V_{GS} = 10 \ V, \ U_{D} = 23 \ A & 0 \\ \hline \hline Turn-On \ Delay \ Time^C & t_{d(orff)} & V_{DD} = 30 \ V, \ R_{g} = 2.5 \ \Omega & 30 & 45 \\ \hline \hline Fall \ Time^C & t_{d(orff)} & U_{D} = 23 \ A, \ V_{GSN} = 10 \ V, \ R_{g} = 2.5 \ \Omega & 30 & 45 \\ \hline \hline \hline Source-Drain \ Diode \ Ratings \ and \ Charge & T_{f} & (T_{C} = 25 \ ^{\circ}C) \\ \hline \hline \hline Pulsed \ Current & I_{SM} & (T_{C} = 25 \ ^{\circ}C) \\ \hline \hline \hline \hline \hline \ \ \ \ \ \ \ \ \ \ \ \ \ \$			$V_{DS} = 60 \text{ V}, V_{GS} = 0 \text{ V}$			1	
$ \begin{array}{c c c c c c c } \hline On-State Drain Current^b & I_D(on) & V_DS = 5 V, V_GS = 10 V & 50 & & & & \\ \hline V_{GS} = 10 V, I_D = 15 A & & 0.025 & & \\ \hline V_{GS} = 10 V, I_D = 15 A, T_J = 125 \ ^{\circ}C & & 0.055 & & \\ \hline V_{GS} = 10 V, I_D = 15 A, T_J = 125 \ ^{\circ}C & & 0.069 & & \\ \hline V_{GS} = 10 V, I_D = 15 A, T_J = 175 \ ^{\circ}C & & 0.069 & & \\ \hline V_{GS} = 4.5 V, I_D = 10 A & & 0.030 & & \\ \hline \hline Dynamic^8 & & & & & & & & & & \\ \hline Dynamic^8 & & & & & & & & & & & & \\ \hline Dutput Capacitance & C_{ISS} & & & & & & & & & & & & \\ \hline Output Capacitance & C_{Crss} & & & & & & & & & & & & & & \\ \hline Output Capacitance & C_{Crss} & & & & & & & & & & & & & & \\ \hline Output Capacitance & C_{Crss} & & & & & & & & & & & & & & & \\ \hline Total Gate Charge^{\circ} & Q_{g} & & & & & & & & & & & & & & & \\ \hline Total Gate Charge^{\circ} & Q_{g} & & & & & & & & & & & & & & & \\ \hline Turn-On Delay Time^{\circ} & t_d(on) & & & & & & & & & & & & & & & \\ \hline Rise Time^{\circ} & t_{d}(ont) & & & & & & & & & & & & & & & & \\ \hline Rise Time^{\circ} & t_{d}(off) & & & & & & & & & & & & & & & & & \\ \hline Source-Drain Diode Ratings and Charcteristics & & & & & & & & & & & & & \\ \hline Pulsed Current & I_{SM} & & & & & & & & & & & & & & & & & & &$	Zero Gate Voltage Drain Current	I _{DSS}	$V_{DS} = 60 \text{ V}, \text{ V}_{GS} = 0 \text{ V}, \text{ T}_{J} = 125 ^{\circ}\text{C}$			50	μA
$ \begin{array}{ c c c c c c } \hline V_{GS} = 10 \ V, \ I_D = 15 \ A \\ \hline V_{GS} = 10 \ V, \ I_D = 15 \ A, \ T_J = 125 \ ^{\circ}{\rm C} \\ \hline V_{GS} = 10 \ V, \ I_D = 15 \ A, \ T_J = 125 \ ^{\circ}{\rm C} \\ \hline V_{GS} = 10 \ V, \ I_D = 15 \ A, \ T_J = 175 \ ^{\circ}{\rm C} \\ \hline V_{GS} = 10 \ V, \ I_D = 15 \ A, \ T_J = 175 \ ^{\circ}{\rm C} \\ \hline V_{GS} = 10 \ V, \ I_D = 15 \ A, \ T_J = 175 \ ^{\circ}{\rm C} \\ \hline V_{GS} = 10 \ V, \ I_D = 15 \ A, \ T_J = 175 \ ^{\circ}{\rm C} \\ \hline V_{GS} = 10 \ V, \ I_D = 15 \ A, \ T_J = 175 \ ^{\circ}{\rm C} \\ \hline V_{GS} = 10 \ V, \ I_D = 15 \ A \\ \hline Dynamic^a \\ \hline Dynamic^a \\ \hline Dut \ Capacitance \ C_{iss} \\ \hline Output \ Capacitance \ C_{iss} \\ \hline Output \ Capacitance \ C_{iss} \\ \hline Output \ Capacitance \ C_{iss} \\ \hline Cotal \ Gate \ Charge^c \ Q_g \\ \hline Total \ Gate \ Charge^c \ Q_g \\ \hline Turn-On \ Delay \ Time^c \ t_d \ (on) \\ \hline Rise \ Time^c \ t_f \\ \hline V_{DD} = 30 \ V, \ V_{GS} = 10 \ V, \ I_D = 23 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 23 \ A, \ V_{GS} = 10 \ V, \ I_D = 23 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 23 \ A, \ M_{CS} = 10 \ V, \ I_D = 23 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 23 \ A, \ V_{CS} = 10 \ V, \ I_D = 23 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 23 \ A, \ V_{CS} = 10 \ V, \ I_D = 23 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 23 \ A, \ V_{CS} = 10 \ V, \ I_D = 23 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 23 \ A, \ V_{CS} = 10 \ V, \ I_D = 23 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 23 \ A, \ V_{CS} = 10 \ V, \ I_D = 23 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 23 \ A, \ V_{CS} = 10 \ V, \ I_D = 23 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 23 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 23 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 25 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 25 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 25 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 25 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 13 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 13 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 13 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 13 \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 13 \ A \ A \\ \hline M_{CS} = 10 \ V, \ I_D = 10 \$			$V_{DS} = 60 \text{ V}, \text{ V}_{GS} = 0 \text{ V}, \text{ T}_{J} = 175 ^{\circ}\text{C}$			250	
$ \begin{array}{ c c c c c } \hline Prise Constant Cons$	On-State Drain Current ^b	I _{D(on)}	$V_{DS} = 5 V, V_{GS} = 10 V$	50			А
$ \begin{array}{ c c c c c } \hline Prain-Source On-State Resistance^{D} & I^{DS(on)} & V_{GS} = 10 \ V, \ I_{D} = 15 \ A, \ I_{J} = 175 \ ^{\circ}C & 0.069 & 0.030 & 0.0$			V _{GS} = 10 V, I _D = 15 A		0.025		
$ \begin{array}{ c c c c c } \hline V_{GS} = 10 \ V, \ I_D = 15 \ A, \ I_J = 1/5 \ C & 0.069 \\ \hline V_{GS} = 4.5 \ V, \ I_D = 10 \ A & 0.030 \\ \hline V_{GS} = 4.5 \ V, \ I_D = 10 \ A & 0.030 \\ \hline V_{GS} = 4.5 \ V, \ I_D = 10 \ A & 0.030 \\ \hline V_{GS} = 4.5 \ V, \ I_D = 15 \ A & 20 \\ \hline Dynamic^a \\ \hline Dynamic^a \\ \hline Dynamic^a \\ \hline Dutput \ Capacitance & C_{iss} & \\ \hline Output \ Capacitance & C_{oss} & \\ \hline Output \ Capacitance & C_{oss} & \\ \hline Output \ Capacitance & C_{oss} & \\ \hline Output \ Capacitance & C_{rss} & \\ \hline Output \ Capacitance & C_{rss} & \\ \hline Output \ Capacitance & C_{rss} & \\ \hline Total \ Gate \ Charge^c & Q_{gd} & \\ \hline Gate \ Charge^c & Q_{gd} & \\ \hline Turn-On \ Delay \ Time^c & I_{d(on)} & \\ \hline Rise \ Time^c & I_{d(on)} & \\ \hline Rise \ Time^c & I_{d(onf)} & \\ \hline Fall \ Time^c & I_{f} & \\ \hline Output \ Capacitance \ Capacitance & C_{rss} & \\ \hline Output \ Capacitance \ Capacitance & C_{rss} & \\ \hline Output \ Capacitance \ Capacitance & C_{rss} & \\ \hline Output \ Capacitance \$		r	V_{GS} = 10 V, I _D = 15 A, T _J = 125 °C		0.055		0
$ \begin{array}{ c c c c c c } \hline Forward Transconductance^b & g_{fs} & V_{DS} = 15 \text{ V}, I_D = 15 \text{ A} & 20 & & \\ \hline \hline Dynamic^a & & & & & & \\ \hline Dynamic^a & & & & & & & \\ \hline Input Capacitance & C_{iss} & & & & & & & & \\ \hline Output Capacitance & C_{oss} & & & & & & & & & \\ \hline Output Capacitance & C_{rss} & & & & & & & & & & \\ \hline Output Capacitance & C_{rss} & & & & & & & & & & \\ \hline Total Gate Charge^c & Q_g & & & & & & & & & & & & \\ \hline Total Gate Charge^c & Q_{gs} & & & & & & & & & & & & & \\ \hline Gate-Source Charge^c & Q_{gd} & & & & & & & & & & & & & & \\ \hline Turn-On Delay Time^c & t_{d(on)} & & & & & & & & & & & & & & \\ \hline Rise Time^c & t_r & & & & & & & & & & & & & & & \\ \hline Iurn-Off Delay Time^c & t_{d(off)} & & & & & & & & & & & & & & & & \\ \hline Fall Time^c & t_f & & & & & & & & & & & & & & & & \\ \hline Source-Drain Diode Ratings and Charzeteristics & (T_C = 25 °C) & & & & & & & & & & & & & & & & & \\ \hline Pulsed Current & I_{SM} & & & & & & & & & & & & & & & & & & &$	Drain-Source On-State Resistance	^I DS(on)	V _{GS} = 10 V, I _D = 15 A, T _J = 175 °C		0.069		Ω
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			V _{GS} = 4.5 V, I _D = 10 A		0.030		
$ \begin{array}{ c c c c c c } \hline Input Capacitance & C_{ISS} \\ \hline Output Capacitance & C_{OSS} \\ \hline Output Capacitance & C_{rSS} \\ \hline Reverse Transfer Capacitance & C_{rSS} \\ \hline Total Gate Charge^{C} & Q_{g} \\ \hline Gate-Source Charge^{C} & Q_{gg} \\ \hline Gate-Drain Charge^{C} & Q_{gg} \\ \hline Turn-On Delay Time^{C} & t_{d(on)} \\ \hline Rise Time^{C} & t_{r} \\ \hline Turn-Off Delay Time^{C} & t_{d(off)} \\ \hline Fall Time^{C} & t_{f} \\ \hline Source-Drain Diode Ratings and Charceteristics \\ \hline Source-Drain Diode Ratings and Charceteristics \\ \hline Diode Forward Voltage & V_{SD} \\ \hline Include Forward Voltage & V_{SD} \\ \hline Include Charge & V_{SD} \\ \hline Include Charge & V_{SD} \\ \hline Include Charge & C_{RS} \\ \hline Include Charge &$	Forward Transconductance ^b	9 _{fs}	V _{DS} = 15 V, I _D = 15 A		20		S
$ \begin{array}{ c c c c c c } \hline Output Capacitance & C_{oss} & V_{GS} = 0 \ V, \ V_{DS} = 25 \ V, \ f = 1 \ MHz & 140 & \\ \hline Reverse Transfer Capacitance & C_{rss} & & 60 & \\ \hline Total Gate Charge^{c} & Q_{g} & & \\ \hline Total Gate Charge^{c} & Q_{gs} & & \\ \hline Gate-Source Charge^{c} & Q_{gd} & & \\ \hline Q_{gd} & & & \\ \hline Turn-On Delay Time^{c} & T_{d(on)} & & \\ \hline Rise Time^{c} & t_{d(on)} & & \\ \hline Turn-Off Delay Time^{c} & t_{d(off)} & & \\ \hline Turn-Off Delay Time^{c} & t_{d(off)} & & \\ \hline Fall Time^{c} & t_{f} & & \\ \hline \hline Source-Drain Diode Ratings and Characteristics & (T_{C} = 25 \ C) & \\ \hline Pulsed Current & I_{SM} & & I_{F} = 15 \ A, \ V_{GS} = 0 \ V & 1.0 & 1.5 & \\ \hline \end{array} $	Dynamic ^a	•		•			
$ \begin{array}{ c c c c c } \hline Reverse Transfer Capacitance & C_{rss} & & & & & & & & & & & & & & & & & & $	Input Capacitance				1500		
$ \begin{array}{ c c c c c } \hline Reverse Transfer Capacitance & C_{rss} & & & & & & & & & & & & & & & & & & $	Output Capacitance	C _{oss}	V_{GS} = 0 V, V_{DS} = 25 V, f = 1 MHz		140		pF
$ \begin{array}{c c c c c c c c c } \hline Gate-Source Charge^{c} & Q_{gs} & & & & & & & & & & & & & & & & & & &$	Reverse Transfer Capacitance				60		
$ \begin{array}{c c c c c c c c c } \hline Gate-Drain Charge^{c} & Q_{gd} & & & & & & & & & \\ \hline \mbox{Gate-Drain Charge}^{c} & & & Q_{gd} & & & & & & & & & \\ \hline \mbox{Turn-On Delay Time}^{c} & & & & & & & & & & & & & & \\ \hline \mbox{Rise Time}^{c} & & & t_{r} & & & & & & & & & & & & \\ \hline \mbox{Iurn-Off Delay Time}^{c} & & t_{r} & & & & & & & & & & & \\ \hline \mbox{Iurn-Off Delay Time}^{c} & & t_{f} & & & & & & & & & & \\ \hline \mbox{Source-Drain Diode Ratings and Characteristics}} & (T_{C} = 25 \ ^{C}) & & & & & & & & & & \\ \hline \mbox{Pulsed Current} & & I_{SM} & & & & & & & & & & & \\ \hline \mbox{Diode Forward Voltage} & & V_{SD} & & I_{F} = 15 \ A, \ V_{GS} = 0 \ V & & & & & & & & 1.0 & & 1.5 \\ \hline \end{array} $	Total Gate Charge ^c	Qg			11	17	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Gate-Source Charge ^c	Q _{gs}	$V_{DS} = 30 \text{ V}, V_{GS} = 10 \text{ V}, I_D = 23 \text{ A}$		3		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}			3		
$\begin{tabular}{ c c c c c c } \hline Turn-Off Delay Time^{\circ} & t_{d(off)} \\ \hline Fall Time^{\circ} & t_{f} & & & & & & & & & \\ \hline Source-Drain Diode Ratings and Characteristics & (T_{C} = 25 \ ^{\circ}C) & & & & & & & & & \\ \hline Pulsed Current & I_{SM} & & & & & & & & & & & \\ \hline Diode Forward Voltage & V_{SD} & I_{F} = 15 \ A, \ V_{GS} = 0 \ V & & & & & & 1.0 & 1.5 \\ \hline \end{array}$	Turn-On Delay Time ^c	t _{d(on)}			8	15	
Fall Time ^c t2540Source-Drain Diode Ratings and Characteristics $(T_C = 25 \degree C)$ 50Pulsed CurrentII50Diode Forward VoltageVI1.01.5	Rise Time ^c		V_{DD} = 30 V, R_L = 1.3 Ω		15	25	20
Fall Time ^c tf2540Source-Drain Diode Ratings and Characteristics $(T_C = 25 \ ^{\circ}C)$ Pulsed CurrentISM50Diode Forward VoltageVSDIF = 15 A, V_{GS} = 0 V1.0	Turn-Off Delay Time ^c	t _{d(off)}	$I_D \cong 23 \text{ A}, V_{GEN} = 10 \text{ V}, R_g = 2.5 \Omega$		30	45	ns
Pulsed Current I _{SM} 50 Diode Forward Voltage V _{SD} I _F = 15 A, V _{GS} = 0 V 1.0 1.5	Fall Time ^c	t _f			25	40	
Diode Forward Voltage V_{SD} $I_F = 15 \text{ A}, V_{GS} = 0 \text{ V}$ 1.01.5	Source-Drain Diode Ratings and Cha	aracteristics	(T _C = 25 °C)				
	Pulsed Current	I _{SM}				50	А
Reverse Recovery Time t_{rr} $I_F = 15 \text{ A}, \text{ di/dt} = 100 \text{ A/}\mu\text{s}$ 3060	Diode Forward Voltage	V _{SD}	$I_{F} = 15 \text{ A}, V_{GS} = 0 \text{ V}$		1.0	1.5	V
	Reverse Recovery Time	t _{rr}	I _F = 15 A, di/dt = 100 A/μs		30	60	ns

Notes:

a. For design aid only; not subject to production testing.

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

c. Independent of operating temperature.

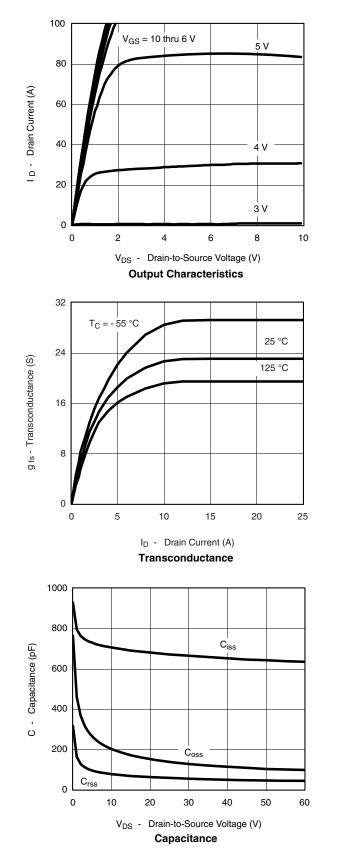
Stresses beyond those listed under "Absolute Maximum Ratings" may cause permanent damage to the device. These are stress ratings only, and functional operation of the device at these or any other conditions beyond those indicated in the operational sections of the specifications is not implied. Exposure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

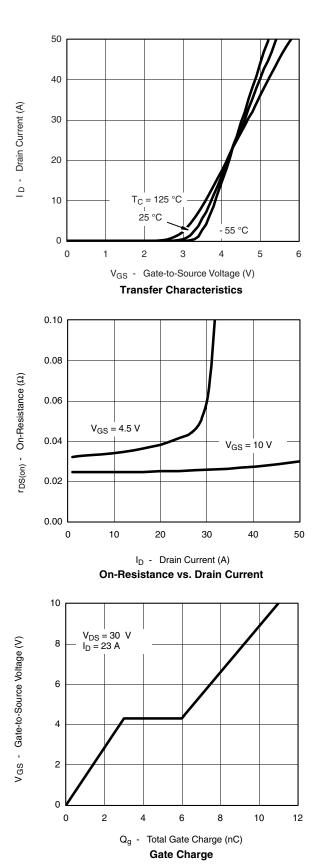
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TYPICAL CHARACTERISTICS 25 °C unless noted

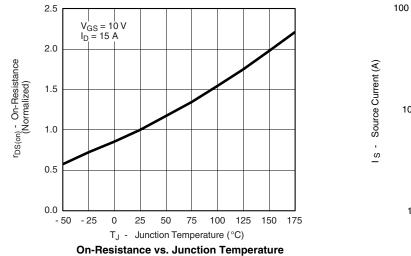


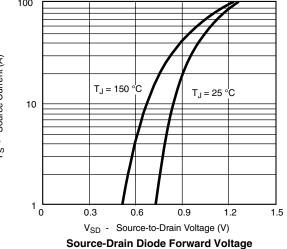


服务热线:400-655-8788



TYPICAL CHARACTERISTICS 25 °C unless noted





SUD23N06-31L-T1-E3

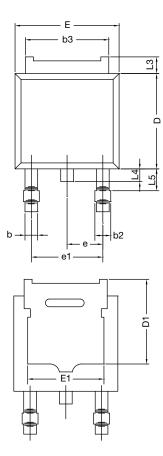


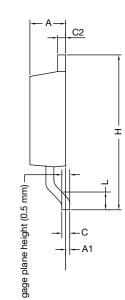
THERMAL RATINGS





TO-252AA CASE OUTLINE





	MILLIN	IETERS	INC	INCHES		
DIM.	MIN.	MAX.	MIN.	MAX.		
А	2.18	2.38	0.086	0.094		
A1	-	0.127	-	0.005		
b	0.64	0.88	0.025	0.035		
b2	0.76	1.14	0.030	0.045		
b3	4.95	5.46	0.195	0.215		
С	0.46	0.61	0.018	0.024		
C2	0.46	0.89	0.018	0.035		
D	5.97	6.22	0.235	0.245		
D1	5.21	-	0.205	-		
Е	6.35	6.73	0.250	0.265		
E1	4.32	-	0.170	-		
Н	9.40	10.41	0.370	0.410		
е	2.28 BSC		0.090 BSC			
e1	4.56	BSC	0.180) BSC		
L	1.40	1.78	0.055	0.070		
L3	0.89	1.27	0.035	0.050		
L4	-	1.02	-	0.040		
L5	1.14	1.52	0.045	0.060		
ECN: X12- DWG: 534	0247-Rev. M, 7	24-Dec-12				

Note

• Dimension L3 is for reference only.

SUD23N06-31L-T1-E3



RECOMMENDED MINIMUM PADS FOR DPAK (TO-252)



Recommended Minimum Pads Dimensions in Inches/(mm)



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