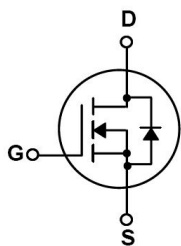
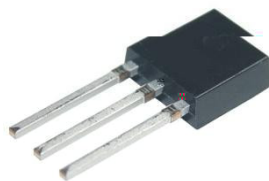


TO-251 N MOS N-CHANNEL MOSFET in a TO-251 Plastic Package.

Super high dense cell design for low $R_{DS(on)}$, Rugged and reliable,surface.

DC/DC

These devices are well suited for high efficiency switching DC/DC converters and switch mode power supplies.

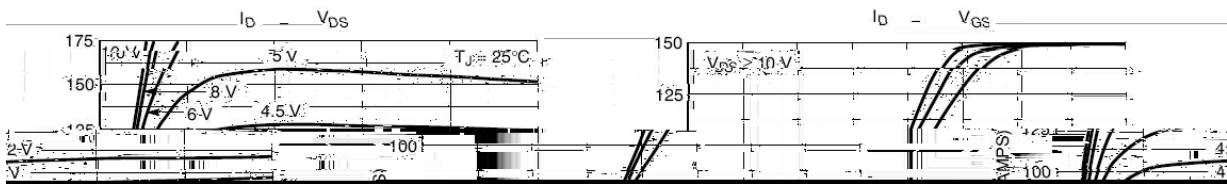
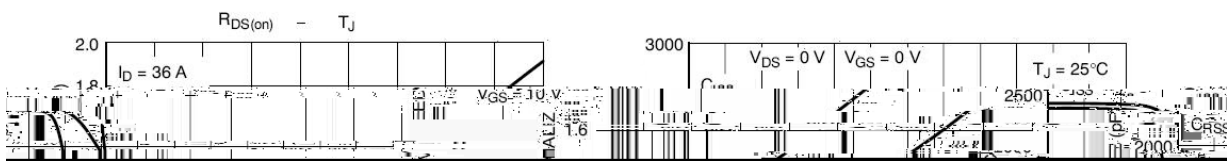


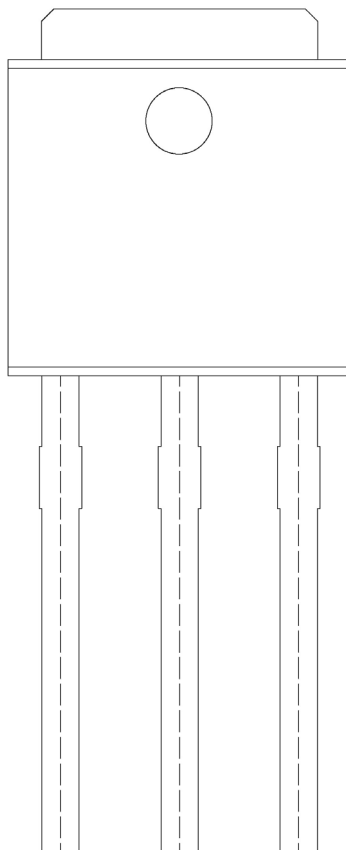
PIN1 G PIN 2 D PIN 3 S

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	30	V
Drain Current	$I_D(T_c=25^\circ\text{C})$	62.8	A
Drain Current Pulsed	I_{DM}	140	A
Gate-Source Voltage	V_{GS}	± 20	V
Single Pulsed Avalanche Energy	E_{SA}	71.7	mJ
Power Dissipation	P_D	1.36	W
Power Dissipation ($T_A=25^\circ\text{C}$)	$P_D(T_c=25^\circ\text{C})$	62.5	W
Junction and Storage Temperature Range	T_J, T_{STG}	-55 to 150	
Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	110	/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V$ $I_D=250\mu A$	30			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=20V$ $V_{GS}=0V$			1.5	μA
Gate-Body Leakage Current, Forward	I_{GSS}	$V_{GS}=\pm 20V$ $V_{DS}=0V$			± 0.1	μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}$ $I_D=250\mu A$	1.0	1.2	3.0	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V$ $I_D=20A$		5.6	8.0	m Ω
		$V_{GS}=4.5V$ $I_D=20A$		8.1	13	m Ω
Forward Transconductance	g_{FS}	$V_{DS}=10V$ $I_D=15A$		27		S
Drain-Source Diode Forward Voltage	V_{SD}	$V_{GS}=0V$ $I_S=20A$			1.2	V
Input Capacitance	C_{iss}	$V_{DS}=20V$ $V_{GS}=0V$ $f=1.0MHz$		1333		pF
Output Capacitance	C_{oss}			600		
Reverse Transfer Capacitance	C_{rss}			218		
Turn-On Delay Time	$t_{d(on)}$	$V_{DD}=10V$ $I_D=36A$ $V_{GS}=10V$ $R_G=3.0\Omega$		6.9		ns
Turn-On Rise Time	t_r			1.3		
Turn-Off Delay Time	$t_{d(off)}$			18.4		
Turn-Off Fall Time	t_f			5.5		





BR

70N03

Note:

BR: Company Code

70N03: Product Type.

9 EHM/6440

