

# isc N-Channel MOSFET Transistor

### NDB708B

FEATURES •Drain Current $-I_D = 54A@ T_C = 25 °C$ •Drain Source Voltage $-V_{DSS} = 80V(Min)$ •Static Drain-Source On-Resistance $-R_{DS(on)} = 25m\Omega(Max)@V_{GS} = 10V$					D <sup>2</sup> PAK 3.Source TO-263 package				
	Motor drive, DC-DC converter, power switch								
and solenoid drive. ABSOLUTE MAXIMUM RATINGS(Ta=25°C)			1		A B U		S		
SYMBOL	PARAMETER	VALUE	UNIT	o		p	ø		
V <sub>DSS</sub>	Drain-Source Voltage	80	V						
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±20	V	•	ر F-+		∫ H		- M -
ID	Drain Current-Continuous	54	A						
I <sub>DM</sub>	Drain Current-Single Pluse	162	A	ļ	DIM	MIN	mm TYP.	MAX	
		150	w		A	9.80	10.00	10.20	
PD	Total Dissipation @T <sub>C</sub> =25°C	150			В	6.60	6.70	6.80	
TJ	Max. Operating Junction Temperature	175	°C		D	15.10 9.60	15.20 9.80	15.30 10.00	
					F	0.70	0.80	0.90	
T <sub>stg</sub>	Storage Temperature	-55~175	°C		G	1.26	1.28	1.30	
	1	1	I		Н	1.20	1.33	1.45	
					L	4.40	4.50	4.60	
THERMA	L CHARACTERISTICS				Q	9.20	9.25	9.30	
					S	1.25	1.30	1.35	
SYMBOL	PARAMETER	MAX	UNIT		V	0.40	0.50	0.60	

SYMBOL	PARAMETER	МАХ	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.0	°C/W

2.60

W

2.70

2.80



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ELECTRICAL CHARACTERISTICS (T <sub>c</sub> =25°C unless otherwise specified)							
SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT		
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 0.25mA	80		V		
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 80V; V <sub>GS</sub> = 0		250	uA		
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0		±100	nA		
V <sub>GS(th)</sub>	Gate Threshold Voltage	$V_{DS}$ = $V_{GS}$ ; $I_D$ = 0.25mA	2.0	4.0	V		
$R_{\text{DS(on)}}$	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 27A		25	mΩ		
$V_{SD}$	Forward On-Voltage	I <sub>S</sub> = 27A; V <sub>GS</sub> = 0		1.3	V		

#### ELECTRICAL CHARACTERISTICS (Tc=25°C unless otherwise specified)

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