

isc N-Channel MOSFET Transistor

NTB082N65S3F

• DESCRIPTION

- Drain-source on-resistance: $R_{DS(on)} \leq 82m\Omega$ @ 10V
- Drain Source Voltage: $V_{DSS} = 650V$ (Min)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

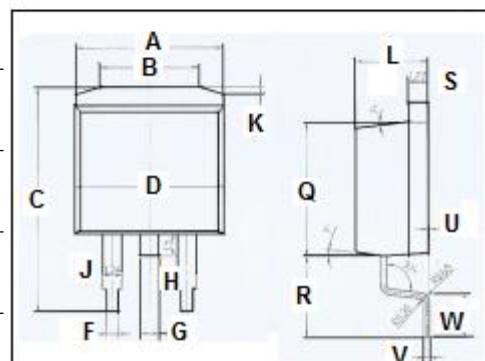
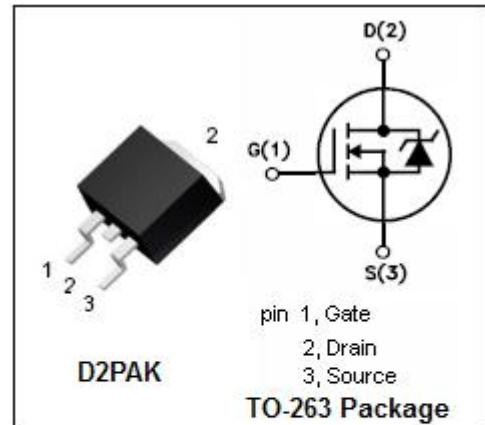
- Industrial power supplies
- UPS

ABSOLUTE MAXIMUM RATINGS ($T_c=25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	650	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-continuous@ $T_c=25^\circ C$	40	A
I_{DM}	Pulse Drain Current	100	A
P_D	Total Dissipation@ $T_c=25^\circ C$	320	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Thermal Resistance, Junction to Case	0.39	$^\circ C/W$
$R_{th(j-a)}$	Thermal Resistance, Junction to Ambient	62.5	$^\circ C/W$



isc N-Channel MOSFET Transistor**NTB082N65S3F****• ELECTRICAL CHARACTERISTICS (T_c=25°C)**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} = 0; I _D = 250µA	650			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} = V _{GS} ; I _D =250µA	3		5	V
V _{SD}	Diode Forward On-Voltage	I _S = 20A ;V _{GS} = 0			1.3	V
R _{Ds(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =20A			82	mΩ
I _{GSS}	Gate-Body Leakage Current	V _{GS} = ±30V;V _{DS} = 0			±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 650V; V _{GS} = 0			10	µA

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