

isc N-Channel MOSFET Transistor

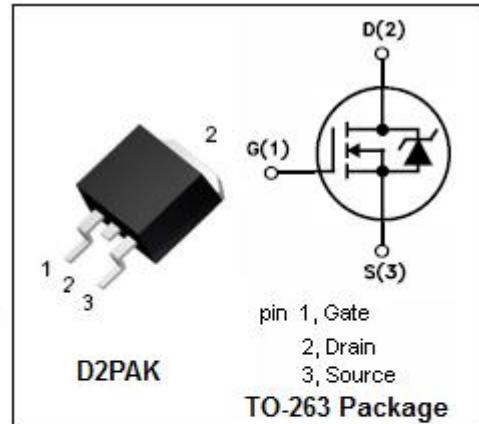
STB32NM50N

• DESCRIPTION

- Drain Current: $I_D = 22A$ @ $T_c=25^\circ C$
- Drain Source Voltage : $V_{DSS} = 500V$ (Min)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

- Switching applications

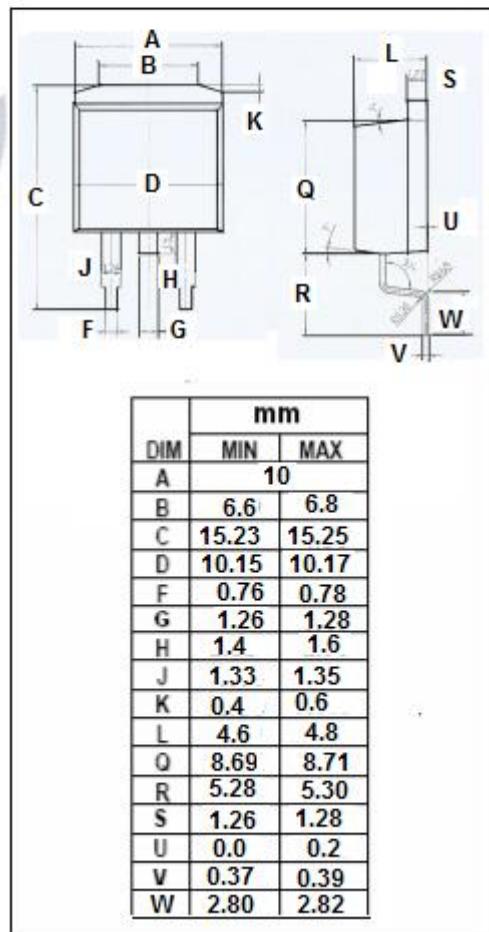


ABSOLUTE MAXIMUM RATINGS($T_c=25^\circ C$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	500	V
V_{GS}	Gate-Source Voltage	± 25	V
I_D	Drain Current-continuous@ $T_c=25^\circ C$	22	A
$I_{D(puls)}$	Pulse Drain Current	88	A
P_{tot}	Total Dissipation@ $T_c=25^\circ C$	190	W
T_j	Max. Operating Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-55~150	°C

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	0.66	°C/W



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• ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$V_{(\text{BR})\text{DSS}}$	Drain-Source Breakdown Voltage	$V_{\text{GS}}=0$; $I_D=1\text{mA}$	500			V
$V_{\text{GS}(\text{th})}$	Gate Threshold Voltage	$V_{\text{DS}}=V_{\text{GS}}$; $I_D=250\mu\text{A}$	2.0		4.0	V
$R_{\text{DS}(\text{on})}$	Drain-Source On-Resistance	$V_{\text{GS}}=10\text{V}$; $I_D=11\text{A}$			0.13	Ω
I_{GSS}	Gate-Body Leakage Current	$V_{\text{GS}}= \pm 25\text{V}$; $V_{\text{DS}}=0$			± 100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{\text{DS}}=500\text{V}$; $V_{\text{GS}}=0$			1	μA
		$V_{\text{DS}}=500\text{V}$; $V_{\text{GS}}=0$; $T_c=125^\circ\text{C}$			100	
V_{SD}	Diode Forward On-Voltage	$I_S=22\text{A}$; $V_{\text{GS}}=0$			1.6	V