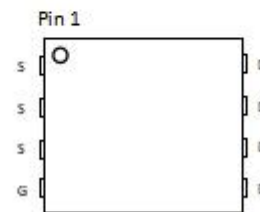


isc N-Channel MOSFET Transistor
BSC350N20NSFD
DESCRIPTION

- Drain Source Voltage- $V_{DSS}=200V(\text{Min})$
- Fast Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation


APPLICATIONS

- Synchronous Rectification in SMPS
- Hard Switching and High Speed Circuit
- Power Tools
- Motor Control


ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	200	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $T_c=25^\circ\text{C}$	35	A
I_{DM}	Drain Current-Single Pulse	140	A
P_D	Power Dissipation@ $T_c=25^\circ\text{C}$	150	W
E_{AS}	Repetitive avalanche energy	100	mJ
T_j	Max. Operating Junction Temperature	175	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~175	$^\circ\text{C}$

THERMAL CHARACTERISTICS

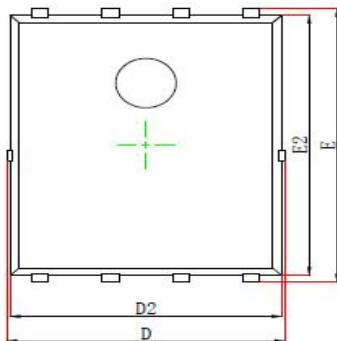
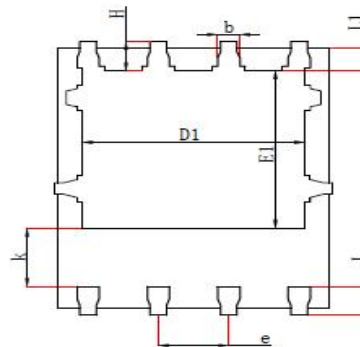
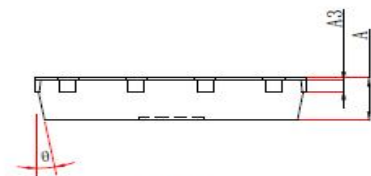
SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance,Junction to Case	1	$^\circ\text{C}/\text{W}$
$R_{th\ j-A}$	Thermal Resistance,Junction to Ambient	50	$^\circ\text{C}/\text{W}$

isc N-Channel MOSFET Transistor
BSC350N20NSFD
• ELECTRICAL CHARACTERISTICS (T_c=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)DSS}	Drain-Source Breakdown Voltage	V _{GS} =0; I _D = 250uA	200	--	--	V
V _{GS(TH)}	Gate Threshold Voltage	V _{DS} =V _{GS} , I _D = 90uA	2	--	4	V
R _{DS(ON)}	Drain-Source On-stage Resistance	V _{GS} = 10V; I _D = 35A	--	--	35	mΩ
I _{GSS}	Gate Source Leakage Current	V _{GS} = ±20V; V _{DS} = 0	--	--	±100	nA
I _{DSS}	Zero Gate Voltage Drain Current	V _{DS} = 160V; V _{GS} = 0	--	--	1	μA
V _{SD}	Source to Drain Diode Forward Voltage	V _{GS} = 0 V, I _F = 35 A	--	--	1.2	V

PACKAGE OUTLINE

Dimensions in mm (1mm = 0.0394")


 Top View
 [顶视图]

 Bottom View
 [背视图]

 Side View
 [侧视图]

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A3	0.254 REF		0.010REF	
D	4.680	5.120	0.184	0.202
E	5.900	6.126	0.232	0.241
D1	3.610	4.110	0.142	0.162
E1	3.380	3.780	0.133	0.149
D2	4.800	5.000	0.189	0.197
E2	5.674	5.826	0.223	0.229
k	1.100	1.390	0.043	0.055
b	0.330	0.510	0.013	0.020
e	1.270TYP		1.270TYP	
L	0.510	0.711	0.020	0.028
L1	0.424	0.576	0.017	0.023
H	0.410	0.726	0.016	0.029
θ	0°	12°	0°	12°

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