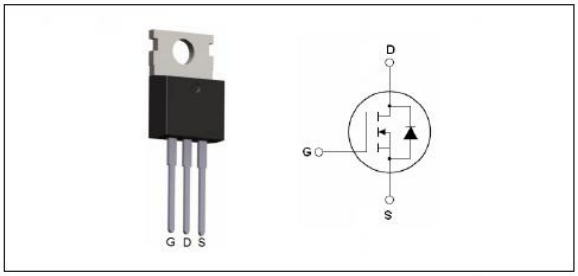
isc N-Channel Mosfet Transistor IRF540NPBF



• FEATURES

- Drain Current I_D= 33A@ T_C=25℃
- Static Drain-Source On-Resistance
  : $R_{DS(on)}$ = 44mΩ (Max)
- Fast Switching Speed
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• DESCRITION

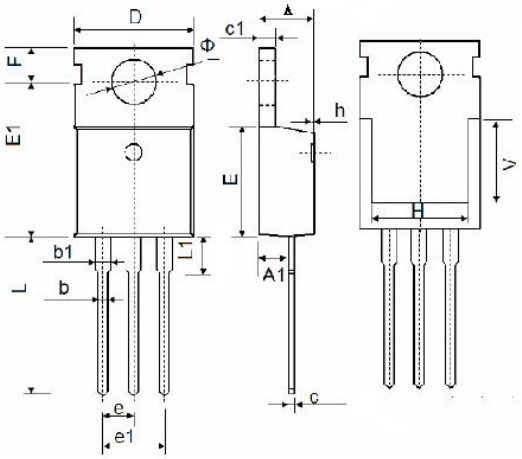
- Designed especially for high voltage,high speed applications, such as off-line switching power supplies , UPS,AC and DC motor controls,relay and solenoid drivers.

• ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	100	V
V_{GS}	Gate-Source Voltage-Continuous	±20	V
I_D	Drain Current-Continuous@ T_C=25℃	33	A
	Drain Current-continuous@ T_C=100℃	23	
I_{DM}	Drain Current-Single Plused	110	A
P_D	Total Dissipation @T_C=25℃	130	W
T_j	Max. Operating Junction Temperature	-55~175	℃
T_{stg}	Storage Temperature	-55~175	℃

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	1.15	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	62	℃/W



Symbol	Dimensions In Millimeters	
	Min.	Max.
A	4.400	4.600
A1	2.250	2.550
b	0.710	0.910
b1	1.170	1.370
c	0.330	0.650
c1	1.200	1.400
D	9.910	10.250
E	8.9500	9.750
E1	12.650	12.950
e	2.540 TYP	
e1	4.980	5.180
F	2.650	2.950
H	7.900	8.100
h	0.000	0.300
L	12.900	13.400
L1	2.850	3.250
V	7.500 REF.	
Φ	3.400	3.800

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	V_{GS}= 0; I_D= 250uA	100		V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}= V_{GS}; I_D= 250uA	2	4	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D= 16A		44	mΩ
I_{GSS}	Gate-Body Leakage Current	V_{GS}= ±20V;V_{DS}= 0		±100	nA
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS}= 100V; V_{GS}=0		25	uA
V_{SD}	Forward On-Voltage	I_S= 16A; V_{GS}=0		1.2	V