

isc N-Channel MOSFET Transistor

P5506BDA

• FEATURES

- Static drain-source on-resistance:
 $R_{DS(on)} \leq 55m\Omega$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• DESCRIPTION

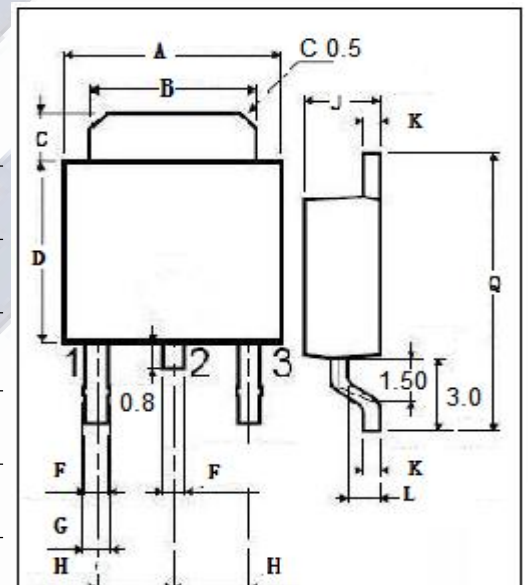
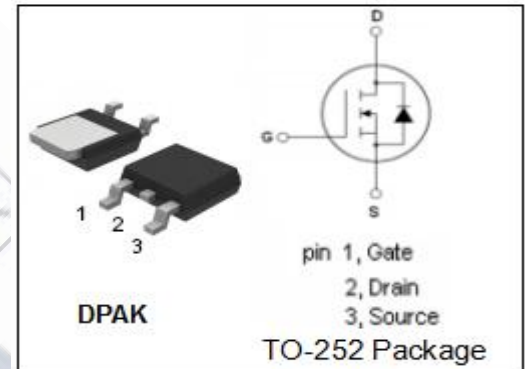
- Switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	60	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-Continuous@ $T_c=25^\circ C$	15	A
I_{DM}	Drain Current-Single Pulsed	30	A
P_D	Total Dissipation @ $T_c=25^\circ C$	27	W
T_j	Max. Operating Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Channel-to-case thermal resistance	4.6	$^\circ C/W$



DIM	mm	mm
A	6.40	6.60
B	5.20	5.40
C	1.15	1.35
D	5.70	6.10
E	0.65	
F	0.75	
G	2.10	2.50
H	2.10	2.40
J	0.40	0.60
K	0.90	1.10
L	9.90	10.1
Q		

isc N-Channel MOSFET Transistor**P5506BDA****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV _{DSS}	Drain-Source Breakdown Voltage	V _{GS} =0V; I _D =250 μA	60			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} ; I _D =250 μA	1.3		2.3	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} =10V; I _D = 10A			55	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{DS} = 0V; V _{GS} = ±20V			±100	nA
I _{DSS}	Drain-Source Leakage Current	V _{DS} = 48V; V _{GS} = 0V			1	μA
		V _{DS} = 40V; V _{GS} = 0V; T _c =125°C			10	μA
V _{SD}	Diode forward voltage	I _{SD} = 10A, V _{GS} = 0V			1.2	V

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