

isc P-Channel MOSFET Transistor**IPD068P03L3, IIPD068P03L3****• FEATURES**

- Static drain-source on-resistance:
 $R_{DS(on)} \leq 6.8m\Omega$
- Enhancement mode:
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• DESCRIPTION

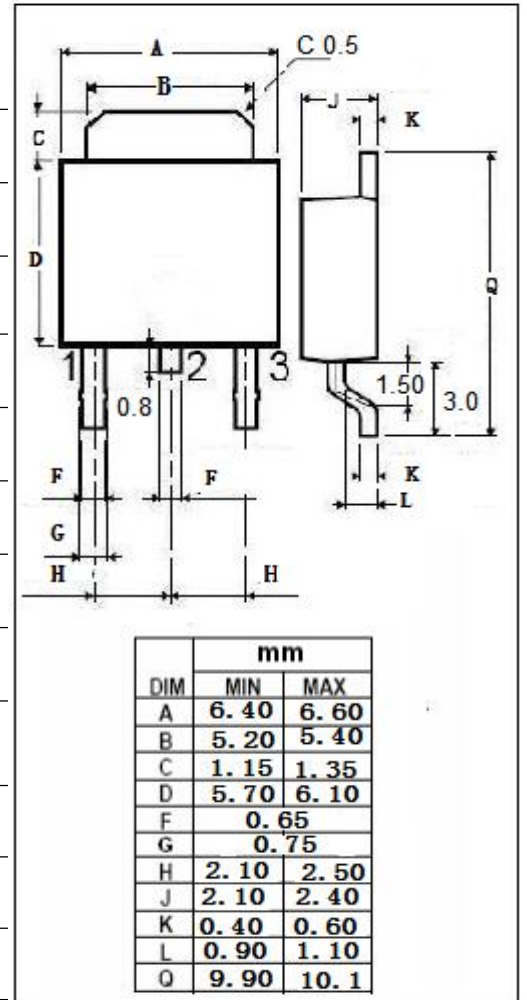
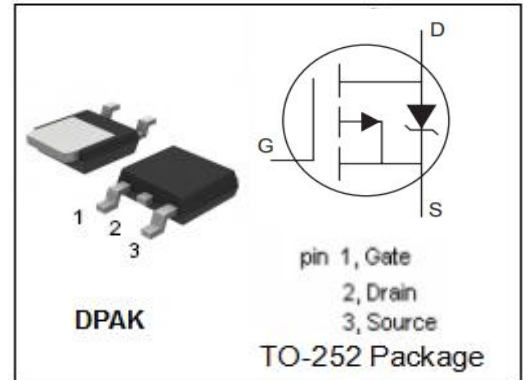
- 175° C operating junction temperature

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	-30	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-Continuous	-70	A
I_{DM}	Drain Current-Single Pulsed	-280	A
P_D	Total Dissipation @ $T_c=25^\circ\text{C}$	100	W
T_j	Max. Operating Junction Temperature	175	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~175	$^\circ\text{C}$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Channel-to-case thermal resistance	1.5	$^\circ\text{C/W}$
$R_{th(j-a)}$	Channel-to-ambient thermal resistance	50	$^\circ\text{C/W}$



isc P-Channel MOSFET Transistor**IPD068P03L3, IIPD068P03L3****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	$V_{GS}=0V; I_D=-0.25mA$	-30			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=V_{GS}; I_D=-0.15mA$	-1.0		-2.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=-10V; I_D=-70A$			6.8	$m\Omega$
I_{GSS}	Gate-Source Leakage Current	$V_{GS}=-20V; V_{DS}=0V$			-0.1	μA
I_{DSS}	Drain-Source Leakage Current	$V_{DS}=-30V; V_{GS}=0V$			-1	μA
V_{SD}	Diode forward voltage	$I_F=-70A, V_{GS}=0V$			-1.2	V

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