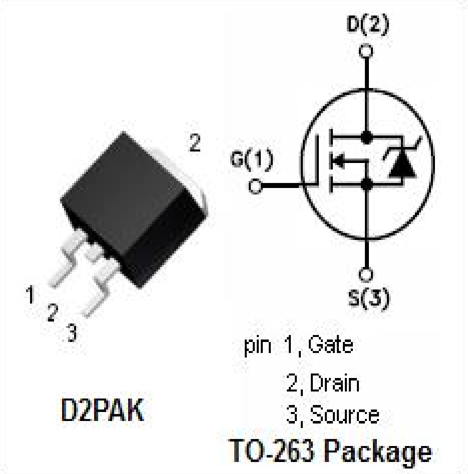
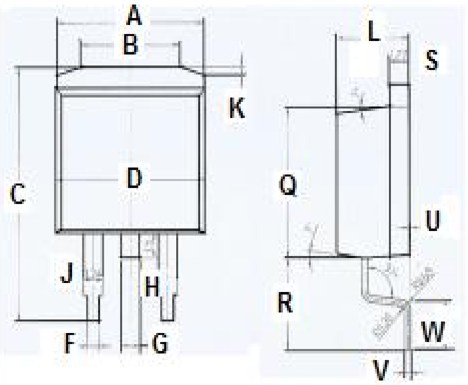
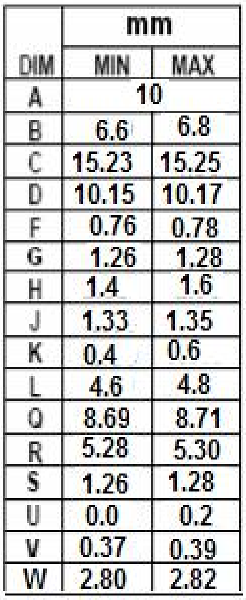
Isc N-Channel MOSFET Transistor IPB60R080P7

- **FEATURES**
- With To-263(D2PAK) package
- Low input capacitance and gate charge
- Low gate input resistance
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



- **APPLICATIONS**
- Switching applications





DIM	mm MIN	mm MAX
A	10	
B	6.6	6.8
C	15.23	15.25
D	10.15	10.17
F	0.76	0.78
G	1.26	1.28
H	1.4	1.6
J	1.33	1.35
K	0.4	0.6
L	4.6	4.8
Q	8.69	8.71
R	5.28	5.30
S	1.26	1.28
U	0.0	0.2
V	0.37	0.39
W	2.80	2.82

- **ABSOLUTE MAXIMUM RATINGS(T_a=25℃)**

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	600	V
V_{GSS}	Gate-Source Voltage	±30	V
I_D	Drain Current-Continuous Tc=25℃ Tc=100℃	37 23	A
I_{DM}	Drain Current-Single Pulsed	110	A
P_D	Total Dissipation @T_C=25℃	129	W
T_{ch}	Max. Operating Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

- **THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
Rth(ch-c)	Channel-to-case thermal resistance	0.97	℃/W
Rth(ch-a)	Channel-to-ambient thermal resistance	62	℃/W

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	V_{GS}=0V; I_D=1.0mA	600			V
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS}=V_{GS}; I_D=0.59mA	3.0		4.0	V
$R_{DS(on)}$	Drain-Source On-Resistance	V_{GS}= 10V; I_D=11.8A		69	80	mΩ
I_{GSS}	Gate-Source Leakage Current	V_{GS}= ±20V;V_{DS}=0V			±0.1	μA
I_{DSS}	Drain-Source Leakage Current	V_{DS}=600V; V_{GS}= 0V;Tj=25℃ V_{DS}=600V; V_{GS}= 0V;Tj=150℃			1 100	μA
V_{SDF}	Diode forward voltage	I_{SD}=11.8A, V_{GS} = 0 V		0.9		V