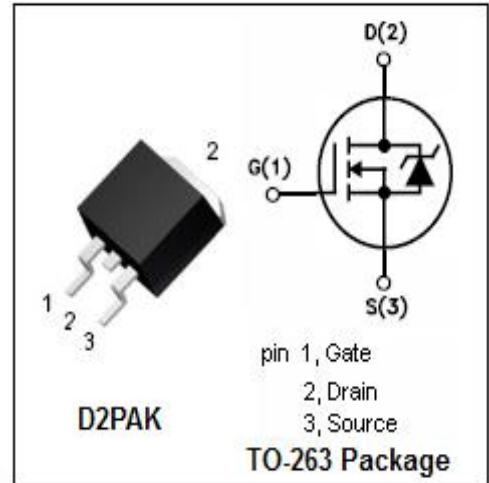


isc N-Channel MOSFET Transistor

2SK2777

• FEATURES

- With TO-263(D2PAK) packaging
- High speed switching
- Standard level gate drive
- Easy to use
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



• APPLICATIONS

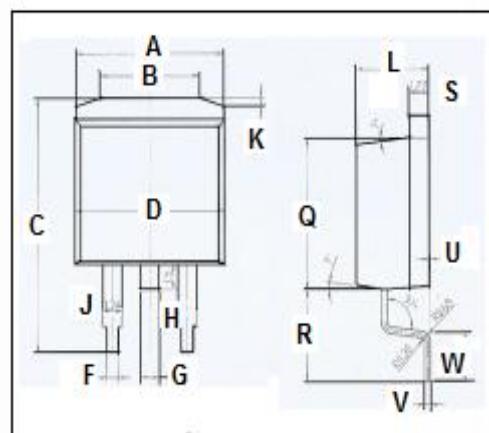
- Power supply
- Switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	600	V
V_{GSS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-Continuous	6	A
I_{DM}	Drain Current-Single Pulsed	24	A
P_D	Total Dissipation	65	W
T_j	Operating Junction Temperature	-55~150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~150	$^\circ\text{C}$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	1.92	$^\circ\text{C}/\text{W}$
$R_{th(ch-a)}$	Channel-to-ambient thermal resistance	83.3	$^\circ\text{C}/\text{W}$



DIM	mm	
	MIN	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

isc N-Channel MOSFET Transistor**2SK2777****ELECTRICAL CHARACTERISTICS** $T_c=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
BV_{DSS}	Drain-Source Breakdown Voltage	$\text{V}_{\text{GS}}=0\text{V}; \text{I}_D= 10\text{mA}$	600			V
$\text{V}_{\text{GS}(\text{th})}$	Gate Threshold Voltage	$\text{V}_{\text{DS}}=10\text{V}; \text{I}_D=1\text{mA}$	2		4	V
$\text{R}_{\text{DS}(\text{on})}$	Drain-Source On-Resistance	$\text{V}_{\text{GS}}= 10\text{V}; \text{I}_D=3\text{A}$		0.9	1.25	Ω
I_{GSS}	Gate-Source Leakage Current	$\text{V}_{\text{GS}}= \pm 25\text{V}; \text{V}_{\text{DS}}= 0\text{V}$			± 10	$\mu\text{ A}$
I_{DSS}	Drain-Source Leakage Current	$\text{V}_{\text{DS}}= 600\text{V}; \text{V}_{\text{GS}}= 0\text{V}$			100	$\mu\text{ A}$
V_{SDF}	Diode forward voltage	$\text{I}_{\text{SD}}=6\text{A}, \text{V}_{\text{GS}} = 0 \text{ V}$			1.7	V