

این دیتاشیت توسط توکل الکترونیک تهیه و ارائه شده است.
جهت مشاهده قیمت، موجودی و ثبت سفارش این قطعه به وبسایت توکل الکترونیک مراجعه فرمایید.



مشاهده قیمت و خرید

برای خرید و مشاهده سایر محصولات کلیک کنید



INCHARGE SEMICONDUCTOR

isc N-Channel MOSFET Transistor

2SK3681

• FEATURES

- Static Drain-Source On-Resistance
: $R_{DS(on)} = 160m\ \Omega$ (Max)
- With low gate drive requirements
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

• APPLICATIONS

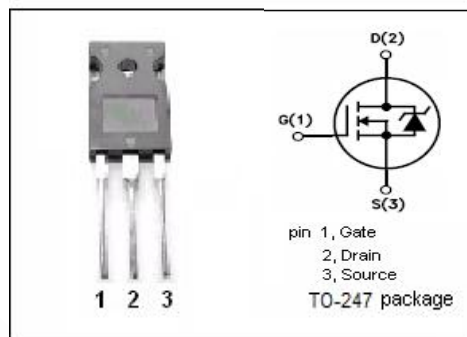
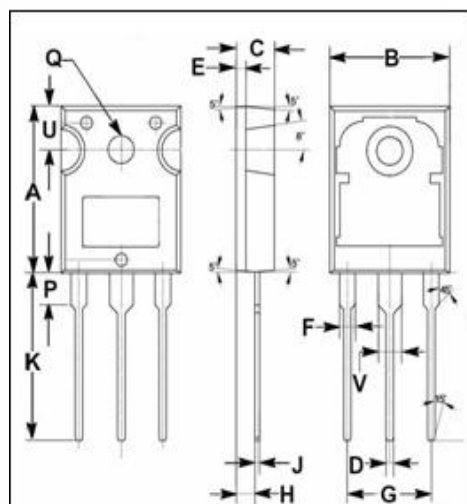
- Switching applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DS}	Drain-Source Voltage	600	V
V_{GS}	Gate-Source Voltage	± 30	V
I_D	Drain Current-Continuous	43	A
I_{DM}	Drain Current-Single Pulsed	152	A
P_D	Total Dissipation	600	W
T_j	Operating Junction Temperature	-55~150	$^\circ C$
T_{stg}	Storage Temperature	-55~150	$^\circ C$

• THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(ch-c)}$	Channel-to-case thermal resistance	0.21	$^\circ C/W$



DIM	mm	
	MIN	MAX
A	19.80	20.20
B	15.40	15.80
C	4.90	5.10
D	0.90	1.10
E	1.40	1.60
F	1.90	2.10
G	10.80	11.00
H	2.40	2.60
J	0.50	0.70
K	19.50	20.50
P	3.90	4.10
Q	3.30	3.50
U	5.20	5.40
V	2.90	3.10

isc N-Channel MOSFET Transistor**2SK3681****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 = 0.25mA	600			V
V _{GS(th)}	Gate Threshold Voltage	V _{DS} =V _{GS} ; I _D =0.25mA	3.0	3.5	5.0	V
R _{DS(on)}	Drain-Source On-Resistance	V _{GS} = 10V; I _D =26A		90	160	mΩ
I _{GSS}	Gate-Source Leakage Current	V _{GS} = ±30V; V _{DS} = 0V			±0.1	μA
I _{DSS}	Drain-Source Leakage Current	V _{DS} = 600V; V _{GS} = 0V; @T _C =25°C V _{DS} = 480V; V _{GS} = 0V; T _C =125°C			25 250	μA
V _{SDF}	Diode forward voltage	I _{SD} =43A, V _{GS} = 0 V			1.5	V
C _{iss}	Input Capacitance	V _{DS} =50V; V _{GS} =0V; f=1.0MHz		2800	3200	pF
C _{oss}	Output Capacitance			97		pF
C _{rss}	Reverse Transfer Capacitance			1.5		pF
Q _g	Total Gate Charge	V _{DS} =480V; I _D =38A; V _{GS} =10V		45	55	nC
Q _{gs}	Gate-Source Charge			15		nC
Q _{gd}	Gate-Drain Charge			11.5		nC
t _{d(on)}	Turn-on Delay Time	V _{DD} =380V; I _D =19A; R _G =1.7 Ω; V _{GS} =10V		16		nS
t _r	Turn-on Rise Time			13		nS
t _{d(off)}	Turn-Off Delay Time			71		nS
t _f	Turn-Off Fall Time			13		nS