

isc N-Channel MOSFET Transistor

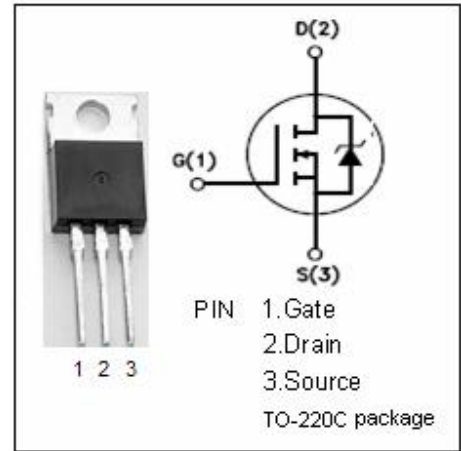
2SK2407

DESCRIPTION

- Drain Current  $I_D = 10A @ T_C = 25^\circ C$
- Drain Source Voltage-  
:  $V_{DSS} = 450V(\text{Min})$
- Fast Switching Speed

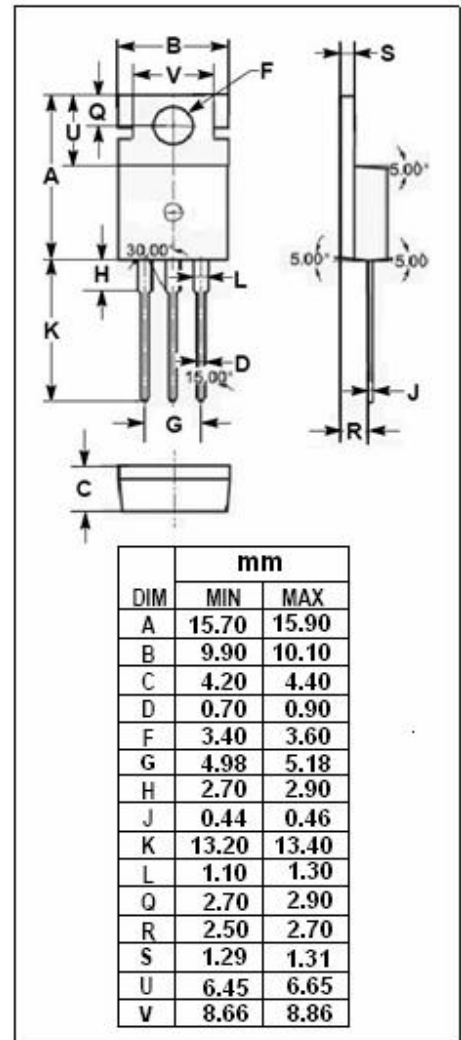
APPLICATIONS

- Switching regulators



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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage ( $V_{GS} = 0$ )	450	V
$V_{GS}$	Gate-Source Voltage	$\pm 30$	V
$I_D$	Drain Current-continuous@ $T_C = 25^\circ C$	10	A
$I_{D(puls)}$	Pulse Drain Current	40	A
$P_{tot}$	Total Dissipation@ $T_C = 25^\circ C$	70	W
$T_j$	Max. Operating Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ C$



## isc N-Channel Mosfet Transistor

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• ELECTRICAL CHARACTERISTICS ( $T_C=25^\circ\text{C}$ )

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	MAX	UNIT
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	$V_{GS}=0$ ; $I_D=1\text{mA}$	450			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=10\text{V}$ ; $I_D=1\text{mA}$	2.0		3.0	V
$V_{SD}$	Forward On-Voltage	$I_S=10\text{A}$ ; $V_{GS}=0$			1.5	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}$ ; $I_D=6\text{A}$		0.55	0.75	$\Omega$
$I_{GSS}$	Gate-Body Leakage Current	$V_{GS}= \pm 30\text{V}$ ; $V_{DS}=0$			$\pm 100$	nA
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS}=450\text{V}$ ; $V_{GS}=0$			1.0	mA
$C_{iss}$	Input Capacitance	$V_{DS}=20\text{V}$ ;		1500		pF
$C_{rss}$	Reverse Transfer Capacitance	$V_{GS}=0\text{V}$ ;		75		
$C_{oss}$	Output Capacitance	$f_T=1\text{MHz}$		220		
$t_r$	Rise Time	$V_{GS}=10\text{V}$ ;		60		ns
$t_{d(on)}$	Turn-on Delay Time	$I_D=5\text{A}$ ;		25		
$t_f$	Fall Time	$V_{DD}=200\text{V}$ ;		60		
$t_{d(off)}$	Turn-off Delay Time	$R_L=33.3\ \Omega$		230		