

isc N-Channel MOSFET Transistor

2SK2333

DESCRIPTION

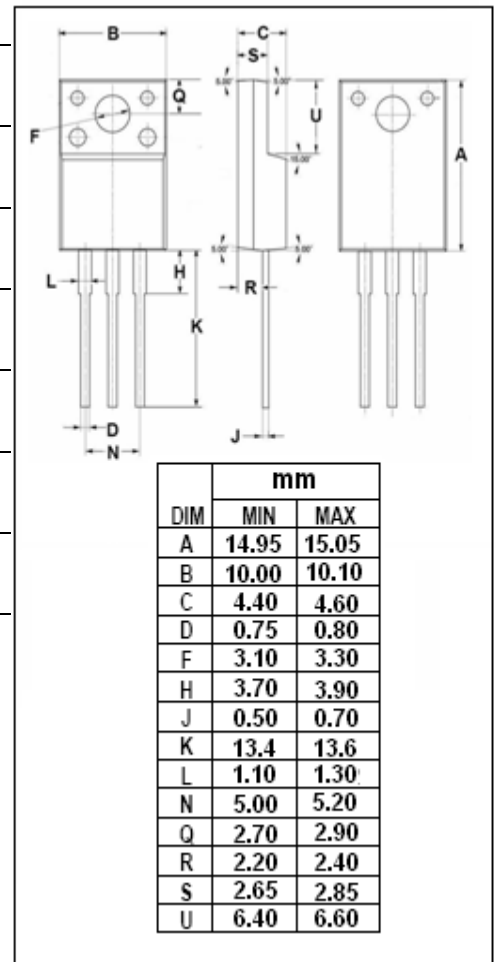
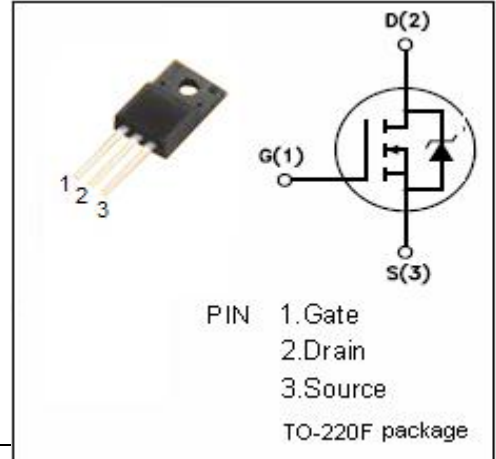
- Drain Current  $I_D = 6A @ T_C = 25^\circ C$
- Drain Source Voltage-  
:  $V_{DSS} = 700V(\text{Min})$
- Fast Switching Speed

APPLICATIONS

- Switching Regulators

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

SYMBOL	ARAMETER	VALUE	UNIT
$V_{DSS}$	Drain-Source Voltage ( $V_{GS} = 0$ )	700	V
$V_{GS}$	Gate-Source Voltage	$\pm 30$	V
$I_D$	Drain Current-continuous@ $T_C = 25^\circ C$	6	A
$I_{D(puls)}$	Pulsed Drain Current	18	A
$P_{tot}$	Total Dissipation@ $T_C = 25^\circ C$	50	W
$T_j$	Max. Operating Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ C$



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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	$V_{GS}=0; I_D=1\text{mA}$	700			V
$V_{GS(th)}$	Gate Threshold Voltage	$V_{DS}=10\text{V}; I_D=1\text{mA}$	2.5		3.5	V
$V_{SD}$	Forward On-Voltage	$I_S=3\text{A}; V_{GS}=0$			1.5	V
$R_{DS(on)}$	Drain-Source On-Resistance	$V_{GS}=10\text{V}; I_D=3\text{A}$		1.5	2.0	$\Omega$
$I_{GSS}$	Gate-Body Leakage Current	$V_{GS}= \pm 30\text{V}; V_{DS}=0$			$\pm 100$	nA
$I_{DSS}$	Zero Gate Voltage Drain Current	$V_{DS}=700\text{V}; V_{GS}=0$			250	$\mu\text{A}$
$C_{iss}$	Input Capacitance	$V_{DS}=10\text{V};$ $V_{GS}=0\text{V};$ $f_T=1\text{MHz}$		1250		pF
$C_{rss}$	Reverse Transfer Capacitance			250		
$C_{oss}$	Output Capacitance			530		
$t_r$	Rise Time	$V_{GS}=10\text{V}; I_D=3\text{A};$ $R_L=50\ \Omega$		60	110	ns
$t_f$	Fall Time			160	250	