

iscN-Channel MOSFET Transistor

2SK135

FEATURES

- Drain Current – $I_D=7A$ @ $T_C=25^\circ C$
- Drain Source Voltage-
: $V_{DSS}=160V$ (Min)
- Static Drain-Source On-Resistance
: $R_{DS(on)}=0.08 \Omega$ (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

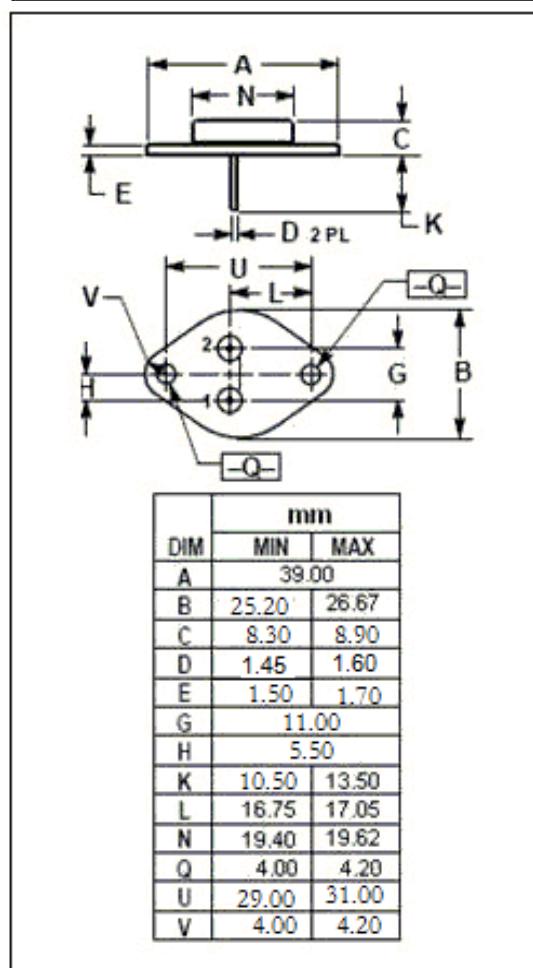
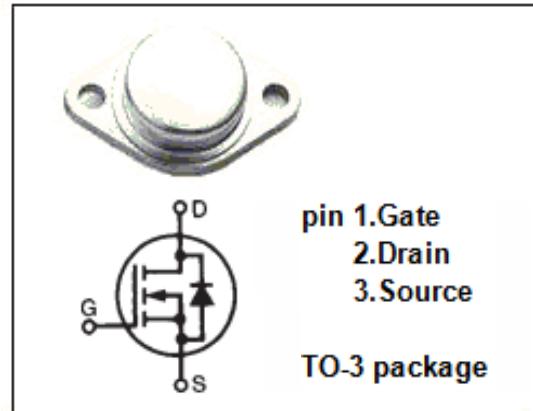
- motor drive, DC-DC converter, power switch and solenoid drive.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage	160	V
V_{GS}	Gate-Source Voltage-Continuous	± 14	V
I_D	Drain Current-Continuous	7	A
I_{DM}	Drain Current-Single Pulse	7	A
P_D	Total Dissipation @ $T_c=25^\circ C$	100	W
T_J	Max. Operating Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	1.25	°C/W



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ELECTRICAL CHARACTERISTICS

 $T_c=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(\text{BR})\text{DSS}}$	Drain-Source Breakdown Voltage	$V_{GS} = -10\text{V}; I_D = 10\text{mA}$	160	--	V
$V_{GS(\text{th})}$	Gate Threshold Voltage	$V_{DS} = 10\text{V}; I_D = 100\text{mA}$	0.15	1.45	V
$R_{DS(\text{on})}$	Drain-Source On-Resistance	$V_{GS} = 10\text{V}; I_D = 3.5\text{A}$	--	9	Ω
I_{GSS}	Gate-Body Leakage Current	$V_{GS} = \pm 16\text{V}; V_{DS} = 0$	--	± 10	μA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS} = 500\text{V}; V_{GS} = 0$	--	100	μA
V_{DF}	Forward On-Voltage	$I_F = 7\text{A}; V_{GS} = 0$	--	0.9	V

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