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P-Channel MOSFET Transistor

2N6898

DESCRIPTION

- SOA is power-dissipation limited
- Nanosecond switching speeds
- Linear transfer characteristics
- High input impedance
- Majority carrier device

APPLICATIONS

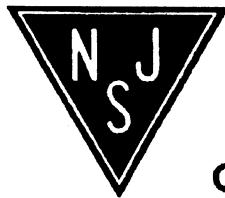
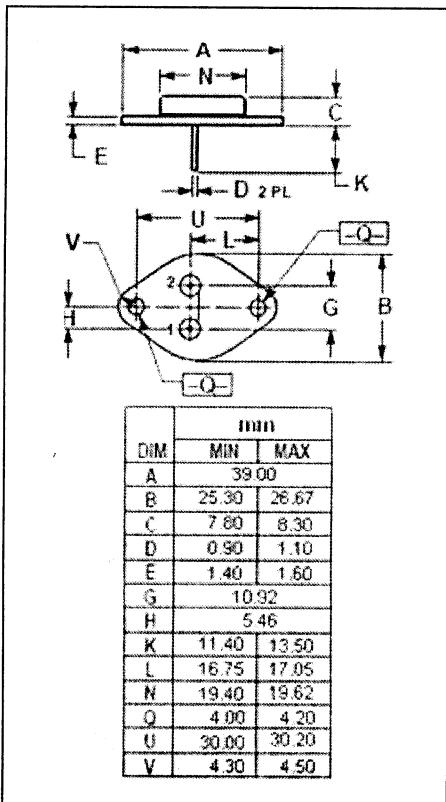
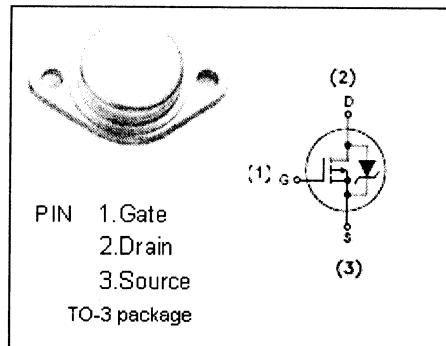
- The 2N6898 is designed for application such as switching regulators, switching converters, motor drivers, relay drivers and drivers for high-power bipolar switching transistors requiring high speed and low gate-driver power

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{DSS}	Drain-Source Voltage ($V_{GS}=0$)	-100	V
V_{GS}	Gate-Source Voltage	± 20	V
I_D	Drain Current-continuous@ $TC=37^\circ\text{C}$	-25	A
P_{tot}	Total Dissipation@ $TC=25^\circ\text{C}$	150	W
T_j	Max. Operating Junction Temperature	-55~150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance,Junction to Case	0.83	$^\circ\text{C}/\text{W}$



Quality Semi-Conductors

P-Channel Mosfet Transistor

2N6898

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(\text{BR})\text{DSS}}$	Drain-Source Breakdown Voltage	$V_{GS}= 0$; $I_D= -1\text{mA}$	-100		V
$V_{GS(\text{TH})}$	Gate Threshold Voltage	$V_{DS}= V_{GS}$; $I_D= -0.25\text{mA}$	-1.5	-3	V
$R_{DS(\text{ON})}$	Drain-Source On-stage Resistance	$V_{GS}= -10\text{V}$; $I_D= -15.8\text{A}$		0.2	Ω
I_{GSS}	Gate Source Leakage Current	$V_{GS}= -20\text{V}$; $V_{DS}= 0$		-100	nA
I_{DSS}	Zero Gate Voltage Drain Current	$V_{DS}= -80\text{V}$, $V_{GS}= 0$		-1	uA
V_{SD}	Diode Forward Voltage	$I_F= -25\text{A}$; $V_{GS}= 0$		1.6	V