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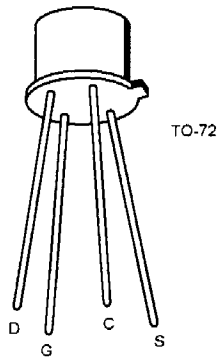
P-Channel Enhancement Mode MOSFET Amplifier/Switch

2N4352

FEATURES

- **Low ON Resistance**
- **Low Capacitance**
- **High Gain**
- **P-Channel Complement to 2N4341**

PIN CONFIGURATION



ABSOLUTE MAXIMUM RATINGS

(T_A = 25°C unless otherwise noted)

Drain-Source Voltage 25V
Drain-Gate Voltage 30V
Gate-Source Voltage . . . . . ±30V
Drain Current 30mA
Storage Temperature Range . . . . . -65°C to +200°C
Operating Temperature Range . . . . . -55°C to +150°C
Lead Temperature (Soldering, 10sec) . . . . . +300°C
Power Dissipation 300mW
Derate above 25°C . . . . . 1.7mW/°C

NOTE: Stresses above those listed under "Absolute Maximum Ratings" may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions above those indicated in the operational sections of the specifications is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ORDERING INFORMATION

Part	Package	Temperature Range
2N4352	Hermetic TO-72	-55°C to +150°C
X2N4352	Sorted Chips in Carriers	-55°C to +150°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

SYMBOL	PARAMETER	MIN	MAX	UNITS	TEST CONDITIONS
$V_{(BR)DSX}$	Drain-Source Breakdown Voltage	-25		Vdc	I_D = -10μA, V_{GS} = 0
I_{DSS}	Zero-Gate-Voltage Drain Current		-10 -10	nAdc μAdc	V_{DS} = -10V, V_{GS} = 0, T_A = 25°C V_{DS} = -10V, V_{GS} = 0, T_A = 150°C
I_{GSS}	Gate Reverse Current		±10	pA	V_{GS} = ±30V, V_{DS} = 0
$V_{GS(th)}$	Gate Threshold Voltage	-1.0	-5.0	Vdc	V_{DS} = -10V, I_D = -10μA
$V_{DS(on)}$	Drain-Source On-Voltage		-1.0	V	I_D = -2mA, V_{GS} = -10V
$I_{D(on)}$	On-State Drain Current	-3.0		mA	V_{GS} = -10V, V_{DS} = -10V
$r_{DS(on)}$	Drain-Source Resistance		600	ohms	V_{GS} = -10V, I_D = 0, f = 1.0kHz
$\lvert y_{fs} \rvert$	Forward Transfer Admittance	1000		μmho	V_{DS} = -10V, I_D = 2.0mA, f = 1.0kHz
C_{iss}	Input Capacitance		5.0	pF	V_{DS} = -10V, V_{GS} = 0, f = 140MHz
C_{rss}	Reverse Transfer Capacitance		1.3		V_{DS} = 0, V_{GS} = 0, f = 140MHz
$C_{d(sub)}$	Drain-Substrate Capacitance		5.0		$V_{D(sub)}$ = -10V, f = 140kHz
t_{d1}	Turn-On Delay		45	ns	I_D = -2.0mAdc, V_{DS} = -10Vdc V_{GS} = -10V
t_r	Rise Time		65		
t_{d2}	Turn-Off Delay		60		
t_f	Fall Time		100		