

MFE823

CASE 22-03, STYLE 11
TO-18 (TO-206AA)

MOSFET

P-CHANNEL — ENHANCEMENT

Refer to 2N4352 for graphs.

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Drain-Source Voltage	V _{DS}	25	Vdc
Drain-Gate Voltage	V _{DG}	± 10	Vdc
Drain Current	I _D	30	mAdc
Total Device Dissipation @ T _A = 25°C Derate above 25°C	P _D	300 1.71	mW mW/°C
Operating and Storage Junction Temperature Range	T _J , T _{stg}	-65 to +175	°C

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Thermal Resistance, Junction to Ambient	R _{θJA}	584	°C/W
Thermal Resistance, Junction to Case	R _{θJC}	250	°C/W

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted.)

Characteristic	Symbol	Min	Max	Unit
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OFF CHARACTERISTICS

Drain-Source Breakdown Voltage (I _D = -10 μAdc, V _{GS} = 0 Vdc)	V _{(BR)DSX}	-25	—	Vdc
Zero-Gate-Voltage Drain Current (V _{DS} = -10 Vdc, V _{GS} = 0)	I _{DSS}	—	-20	nAdc
Gate Reverse Current (V _{GS} = -10 Vdc, V _{DS} = 0)	I _{GSS}	—	1.0	pAdc

ON CHARACTERISTICS

Gate Threshold Voltage (V _{DS} = -10 Vdc, I _D = -10 μAdc)	V _{GS(Th)}	-2.0	-6.0	Vdc
On-State Drain Current (V _{DS} = -10 Vdc, V _{GS} = -10 Vdc)	I _{D(on)}	-3.0	—	mAdc

SMALL-SIGNAL CHARACTERISTICS

Forward Transfer Admittance (V _{DS} = -10 Vdc, I _D = -2.0 mAdc, f = 1.0 kHz)	y _{fs}	1000	—	μmhos
Input Capacitance (V _{DS} = -10 Vdc, V _{GS} = -10 Vdc, f = 1.0 MHz)	C _{iss}	—	6.0	pF
Reverse Transfer Capacitance (V _{DS} = -10 Vdc, V _{GS} = -10 Vdc, f = 1.0 MHz)	C _{rss}	—	1.5	pF