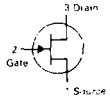
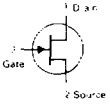
BF246,A,B,C

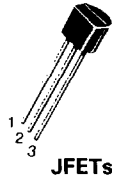
CASE 29-04, STYLE 22
TO-92 (TO-226AA)



BF247,A,B,C

CASE 29-04, STYLE 5
TO-92 (TO-226AA)





JFETs
SWITCHING

N-CHANNEL — DEPLETION

Refer to MPF4391 for graphs.

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Drain-Source Voltage	V_{DS}	±25	Vdc
Drain-Gate Voltage	V_{DG}	25	Vdc
Gate-Source Voltage	V_{GS}	25	Vdc
Drain Current	I_D	100	mAdc
Forward Gate Current	$I_{G(f)}$	10	mAdc
Total Device Dissipation @ T_A = 25°C Derate above 25°C	P_D	350 2.8	mW mW/°C
Storage Channel Temperature Range	T_{stg}	−65 to +150	°C

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

Characteristic			Symbol	Min	Typ	Max	Unit
OFF CHARACTERISTICS							
Gate-Source Breakdown Voltage (I_G = 1 μA, V_{DS} = 0)			$V_{(BR)GSS}$	25	—	—	V
Gate-Source (V_{DS} = 15 V, I_D = 200 μA)	BF246, BF246A, BF246B, BF246C,	BF247 BF247A BF247B BF247C	V_{GS}	−0.5 −1.5 −3 −5.5	— — — —	−14 −4 −7 −12	V
Gate-Source Cutoff Voltage (V_{DS} = 15 V, I_D = 10 nA)			$V_{GS(off)}$	0.6	—	14.5	V
Gate Cutoff Current (V_{GS} = 15 V, V_{DS} = 0)			I_{GSS}	—	—	5	nA
ON CHARACTERISTICS							
Zero-Gate Voltage Drain Current (V_{DS} = 15 V, V_{GS} = 0)	BF246, BF246A, BF246B BF246C,	BF247 BF247A BF247B BF247C	I_{DSS}	30 30 60 110		250 80 140 250	mA
SMALL-SIGNAL CHARACTERISTICS							
Forward Transfer Admittance (V_{DS} = 15 V, I_D = 10 mA, f = 1 kHz)			Y_{fs}	8	23		mmhos
Reverse Transfer Capacitance (V_{DS} = 15 V, I_D = 10 mA, f = 1 kHz)			C_{rss}		3.3		pF
Input Capacitance (V_{DS} = 15 V, I_D = 10 mA, f = 1 MHz)			C_{in}		6		pF
Output Capacitance (V_{DS} = 15 V, I_D = 10 mA, f = 1 MHz)			C_{out}		5		pF
Cutoff Frequency (V_{DS} = 15 V, V_{GS} = 0)			$F_{(Yfs)}$		450		MHz

4