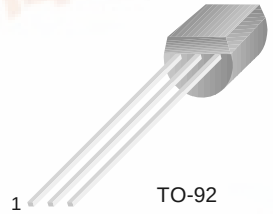
FAIRCHILD SEMICONDUCTOR®

BF245A/BF245B/BF245C

N-Channel Amplifiers

- This device is designed for VHF/UHF amplifiers.
- Sourced from process 50.



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1. Gate 2. Source 3. Drain

Absolute Maximum Ratings T_a=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{DG}	Drain-Gate Voltage	30	V
V_{GS}	Gate-Source Voltage	-30	V
I_{GF}	Forward Gate Current	10	mA
P_D	Total Device Dissipation @T_A=25°C Derate above 25°C	350 2.8	mW mW/°C
T_J, T_{STG}	Operating and Storage Junction Temperature Range	- 55 ~ 150	°C

Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter		Test Condition	Min.	Max.	Units
Off Characteristics						
$V_{(BR)GSS}$	Gate-Source Breakdown Voltage		V_{DS} = 0, I_G = 1μA	-30		V
V_{GS}	Gate-Source	BF245A	V_{DS} = 15V, I_D = 200μA	-0.4	-2.2	V
		BF245B		-1.6	-3.8	
		BF245C		-3.2	-7.5	
V_{GS}(off)	Gate-Source Cut-off Voltage		V_{DS} = 15V, I_D = 10nA	-0.5	-8	V
I_{GSS}	Gate Reverse Current		V_{GS} = -20V, V_{GS} = 0		-5	nA
On Characteristics						
I_{DSS}	Zero-Gate Voltage Drain Current					
		BF245A	V_{GS} = 15V, V_{GS} = 0	2	6.5	mA
		BF245B		6	15	
		BF245C		12	25	
On Characteristics						
g_{fs}	Common Source Forward Transconductance		V_{GS} = 15V, V_{GS} = 0, f = 1KHz	3	6.5	mmhos

Package Dimensions

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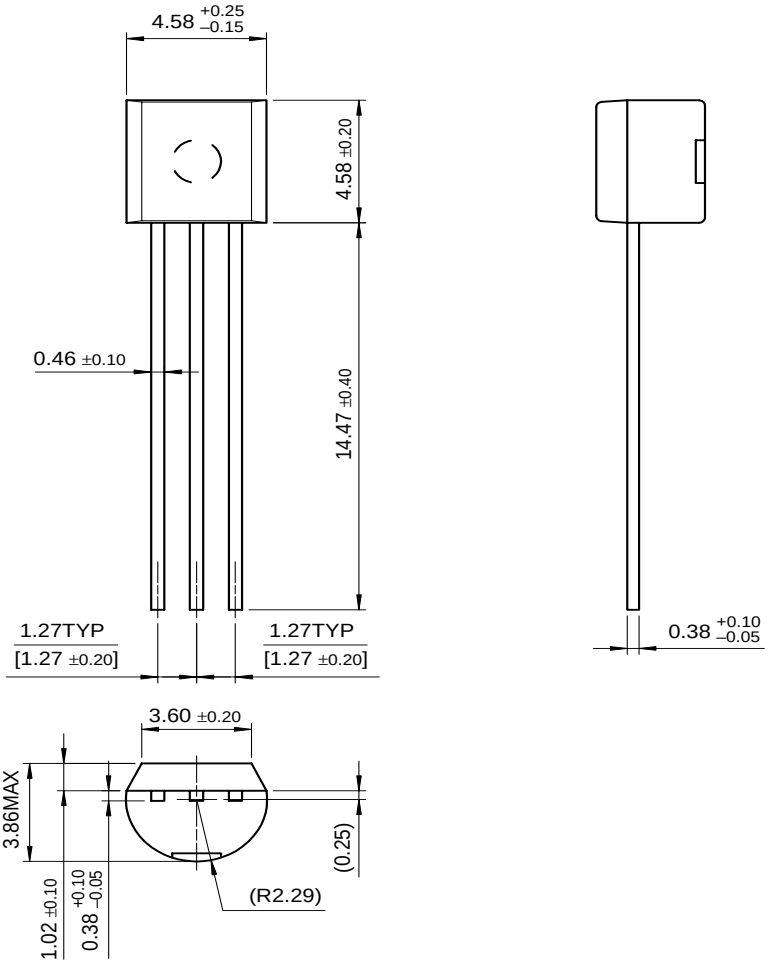

Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench®	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	QS™	SyncFET™
EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic®
E²CMOS™	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
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Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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Definition of Terms

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