

Field Effect Transistors

	Type No.	Case	Construction (see note 1)	Maximum Ratings at 25°C amb.			Characteristics										SPECIAL FEATURES
				V _{DG} V	I _G mA	P _{tot} W	I _{DSS}		V _{DS} V	Y _{fs} V _{GS} =0		C _{ISS} Max. pf	I _{GSS} Max. nA	V _{GS} V	r _{DS(on)} Max. Ω	NF Max. dB	
							Min. mA	Max. mA		Min. μmho	Max. μmho						
Silicon P-Channel Field Effect	2N2386	TO5	P	20	10	0.5	—	—	—	1000	—	50	10	10	—	—	NF measured at V _{DS} = -5V, I _D = 1 mA f = 1 kc/s, R _G = 1 M Ω f = 10 c/s, R _G = 10 M Ω V _{DS} = -10 V, f = 1 Kc/s, R _G = 10 M Ω
	2N2497	TO5	P	20	10	0.5	1	3	-10	1000	2000	32	10	10	—	3	
	2N2498	TO5	P	20	10	0.5	2	6	-10	1500	3000	32	10	10	—	3	
	2N2499	TO5	P	20	10	0.5	5	15	-10	2000	4000	32	10	10	—	4	
	2N2500	TO5	P	20	10	0.5	1	6	-10	1000	2200	32	10	10	—	5	
	2N3328	TO72	P	20	1	—	—	1	-10	100	—	4	1	15	—	3	
	2N3329	TO72	P	20	10	0.3	1	3	-10	1000	2000	20	10	10	—	3	NF measurements as for XN2497—99 Series
	2N3330	TO72	P	20	10	0.3	2	6	-10	1500	3000	20	10	10	—	3	
	2N3331	TO72	P	20	10	0.3	5	15	-10	2000	4000	20	10	10	—	4	
	2N3332	TO72	P	20	10	0.3	1	6	-10	1000	2200	20	10	10	—	5	NF measurements as for 2N2500
	2N3573	TO72	P	25	1	—	0.02	0.1	-10	100	300	6	0.6	15	—	3	NF measured at V _{DS} = 10V f = 1 Kc/s, R _G = 10 M Ω
	2N3574	TO72	P	25	1	—	0.075	0.375	-10	200	600	6	0.6	15	—	3	
	2N3575	TO72	P	25	1	—	0.2	1	-10	300	900	6	0.6	15	—	3	
	2N3820	SILECT	P	20	10	0.2	0.3	15	-10	800	5000	32	20	10	—	—	Low Cost General Purpose
	2N3909	TO72	P	20	10	0.3	0.3	15	-10	1000	5000	32	10	10	—	—	
	2N3993	TO72	P	25	10	0.3	10	—	-10	12000	6000	16	—	—	150	—	Chopper Applications I _{D(OFF)} = 1.2nA max.
	2N3994	TO72	P	25	10	0.3	2	—	-10	4000	10000	16	—	—	300	—	
Silicon N-Channel Field Effect	2N3819	SILECT	P	25	10	0.2	2	20	15	2000	6500	8	2	15	—	—	Low Cost General Purpose NF at R _G = 1 m Ω, f = 1 Kc/s NF at 100 Mc/s, R _G = 1 K Ω Y _{fs} = 3.2 min at 200 Mc/s Chopper. I _{D(OFF)} ≤ 0.1 nA, C _{rss} ≤ 3pf
	2N3821	TO72	EP	50	10	0.3	0.5	2.5	15	1500	4500	6	0.1	30	—	5	
	2N3822	TO72	EP	50	10	0.3	2	10	15	3000	6500	6	0.1	30	—	5	
	2N3823	TO72	EP	30	10	0.3	4	20	15	3500	6500	6	0.5	20	—	2.5	
	2N3824	TO72	EP	50	10	0.3	—	—	—	—	—	—	0.1	30	250	—	VHF Amplifier and Mixer High Speed Chopper High Y _{fs} C _{rss} ratio
	TIS34	SILECT	EP	30	10	0.2	4	20	15	3500	6500	6	5	20	—	—	
	TIS42	SILECT	EP	25	10	0.25	10	—	10	—	—	18	5	15	70	—	
	TIS58	SILECT	EP	25	10	0.2	2.5	8	15	1300	4000	6	4	15	—	—	
	TIS59	SILECT	EP	25	10	0.2	6	25	15	2300	5000	6	4	15	—	—	Specially Characterised for VHF operation
	BF244A	SILECT	EP	30	10	360	2	6.5	—	4000	6500	6	5	30	—	—	
	BF244B	SILECT	EP	30	10	360	6.5	15	—	4000	6500	6	5	30	—	—	
	BF244C	SILECT	EP	30	10	360	15	25	—	4000	6500	6	5	30	—	—	
	BF245A	TO18	EP	30	10	360	2	6.5	—	4000	6500	6	5	30	—	—	
	BF245B	TO18	EP	30	10	360	6.5	15	—	4000	6500	6	5	30	—	—	
	BF245C	SILECT	EP	30	10	360	15	25	—	4000	6500	6	5	30	—	—	
	BF245C	TO18 SILECT	EP	30	10	360	15	25	—	4000	6500	6	5	30	—	—	
Silicon N-Channel Dual Matched Field Effect	TIS25	TO5-2	EP	50	10	0.3 + 0.3	0.5	8	15	1500	6000	8	0.25	30	500	5	$\left\{ \begin{array}{l} 5 \\ 10 \\ 15 \end{array} \right\} \frac{(\Delta V_{GS}, \Delta V_{BE})}{mV/^{\circ}C} \frac{\Delta T_A}{\Delta T_A}$ at I _D = 0.5 mA $\left\{ \begin{array}{l} \pm 5 \\ \pm 10 \\ \pm 15 \end{array} \right\} \frac{I_{GSS}}{\% I_{DSS}},$ $\left\{ \begin{array}{l} \pm 5 \\ \pm 10 \\ \pm 15 \end{array} \right\} \frac{Y_{fs}}{Y_{fs}}$
	TIS26	TO5-2	EP	50	10	0.3 + 0.3	0.5	8	15	1500	6000	8	0.25	30	500	5	
	TIS27	TO5-2	EP	50	10	0.3 + 0.3	0.5	8	15	1500	6000	8	0.25	30	500	—	
Germanium P Channel Field Effect	TIXM12	—	P	20	10	100	5	25	20	5000	20000	15	10	20	—	2	N.F. measured at V _{DS} = -8 V I _D = -5mA R _G = -500 Ω f = 100 mc/s Storage Temperature range -65°C to 125°C.
	TIXM301	TO72	P	20	10	150	5	25	20	6500	20000	15	6	20	—	1.8	

NOTE 1: The following symbols have been used throughout the Product Summary:

Under "Construction":
A — Alloyed
D — Diffused
E — Epitaxial
G — Grown
M — Mesa
P — Planar

Under h_{FE}:
* — h_{FE}

Under f_T:
φ — f_{hfb}
Δ — f_{hfe}
‡ — typical

Under Dissipation:
† — dissipation at T_{case} = 25°C

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