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Manufacturers of World Class Discrete Semiconductors

2N5484 THRU 2N5486

N CHANNEL JUNCTION
FIELD EFFECT TRANSISTOR

JEDEC TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N5484 Series types are Silicon N Channel J-FETs designed for RF amplifier and mixer applications. These devices will operate well in the VHF/UHF frequency range.

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

	SYMBOL		UNIT
Gate-Drain Voltage	V_{GD}	25	V
Gate-Source Voltage	V_{GS}	25	V
Drain Current	I_D	30	mA
Gate Current	I_G	10	mA
Power Dissipation	P_D	310	mW
Operating and Storage Junction Temperature	T_J,T_{STG}	-65 TO +150	°C

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

		2N5484		2N5485		2N5486		
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	MIN	MAX	UNIT
I_{GSS}	V_{GS}=20V		1.0		1.0		1.0	nA
I_{GSS}	V_{GS}=20V, T_A=100°C		0.2		0.2		0.2	µA
I_{DSS}	V_{DS}=15V	1.0	5.0	4.0	10	8.0	20	mA
BV_{GSS}	I_G=1.0µA	25		25		25		V
$V_{GS(OFF)}$	V_{DS}=15V, I_D=10nA	0.3	3.0	0.5	4.0	2.0	6.0	V
Y_{fs}	V_{DS}=15V, V_{GS}=0, f=1.0kHz	3000	6000	3500	7000	4000	8000	µmhos
Y_{os}	V_{DS}=15V, V_{GS}=0, f=1.0kHz		50		60		75	µmhos
C_{iss}	V_{DS}=15V, V_{GS}=0, f=1.0MHz		5.0		5.0		5.0	pF
C_{oss}	V_{DS}=15V, V_{GS}=0, f=1.0MHz		2.0		2.0		2.0	pF
C_{rss}	V_{DS}=15V, V_{GS}=0, f=1.0MHz		1.0		1.0		1.0	pF
$R_e(yis)$	V_{DS}=15V, V_{GS}=0, f=100MHz		100		-		-	µmhos
$R_e(yis)$	V_{DS}=15V, V_{GS}=0, f=400MHz		-		1000		1000	µmhos
$R_e(yos)$	V_{DS}=15V, V_{GS}=0, f=100MHz		75		-		-	µmhos
$R_e(yos)$	V_{DS}=15V, V_{GS}=0, f=400MHz		-		100		100	µmhos
$R_e(yfs)$	V_{DS}=15V, V_{GS}=0, f=100MHz	2500		-		-		µmhos
$R_e(yfs)$	V_{DS}=15V, V_{GS}=0, f=400MHz	-		3000		3500		µmhos
NF	V_{DS}=15V, V_{GS}=0, R_G=1.0Megohm, f=1.0kHz		2.5		2.5		2.5	dB
NF	V_{DS}=15V, I_D=1.0mA, R_G=1.0kohm, f=100MHz		3.0		-		-	dB
NF	V_{DS}=15V, I_D=1.0mA, R_G=1.0kohm, f=200MHz	4.0TYP		-		-		dB
NF	V_{DS}=15V, I_D=4.0mA, R_G=1.0kohm, f=100MHz		-		2.0		2.0	dB
NF	V_{DS}=15V, I_D=4.0mA, R_G=1.0kohm, f=400MHz		-		4.0		4.0	dB
G_{ps}	V_{DS}=15V, I_D=1.0mA, f=100MHz	16	25	-	-	-	-	dB
G_{ps}	V_{DS}=15V, I_D=1.0mA, f=200MHz	14TYP		-		-		dB
G_{ps}	V_{DS}=15V, I_D=4.0mA, f=100MHz	-	-	18	30	18	30	dB
G_{ps}	V_{DS}=15V, I_D=4.0mA, f=400MHz	-	-	10	20	10	20	dB