

200MHz 24dB Gain CATV Reverse Integrated Circuit

★ FEATURES

- Excellent linearity
- Excellent distortion performance
- High gain
- Extremely low noise
- Excellent return loss properties

★ APPLICATIONS

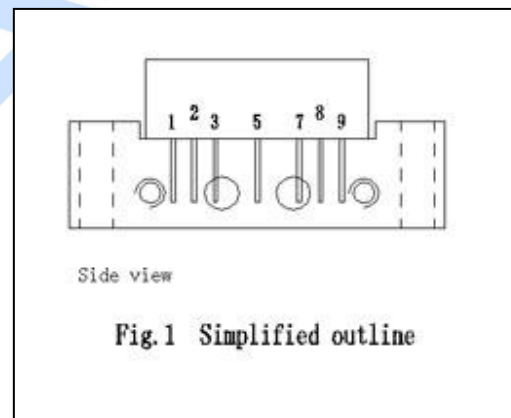
For CATV systems operating over a frequency range of 5 to 200MHz.

PINNING — SOT115J

PIN	DESCRIPTION
1	Input
2	Common
3	Common
5	+VB
7	Common
8	Common
9	Output

★ DESCRIPTION

KR224N-24 in a SOT115J package, operating at a supply voltage of 24V(DC), Reverse amplifier in two-way CATV systems.



★ QUICK REFERENCE DATA

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
G _p	power gain	f=5MHz	23.5	24.0	25.0	dB
		f=200MHz	23.5	-	-	dB
I _{tot}	total current consumption (DC)	VB= +24V	150	170	190	mA

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★ LIMITING VALUES

In accordance with the Absolute Maximum Rating System (IEC 134).

SYMBOL	PARAMETER	MIN.	MAX.	UNIT
VB	supply voltage	-	25	V
V _i	RF input voltage	-	55	dBmV
T _{stg}	storage temperature	-20	+100	°C
T _{mb}	operating mounting base temperature	-40	+100	°C

★ CHARACTERISTICS

Bandwidth 5 to 200MHz; VB = +24 V; T_{mb} = 25 °C; Z_S = Z_L = 75 Ω .

SYMBOL	PARAMETER	CONDITIONS	MIN	Typ	MAX	UNIT
G _p	power gain	f=5MHz	23.5	24.0	25.0	dB
SL	slope cable equivalent	f=5 to 200MHz	0	0.5	1.0	dB
FL	flatness of frequency response	f=5 to 200MHz	-	-	±0.2	dB
S ₁₁	input return losses	f=5 to 200MHz	18	-	-	dB
S ₂₂	output return losses	f=5 to 200MHz	18	-	-	dB
CTB	composite triple beat	17channels Flat output level across the band. V _o =50dBmV at 200.25 MHz,	-	-61	-	dB
CSO	composite second order distortion		-	-65	-	dB
X _{mod}	cross modulation		-	-65	-	dB
F	noise figure	f=200MHz	-	-	5.0	dB
I _{tot}	total current consumption (DC)	VB=+24V	150	170	190	mA

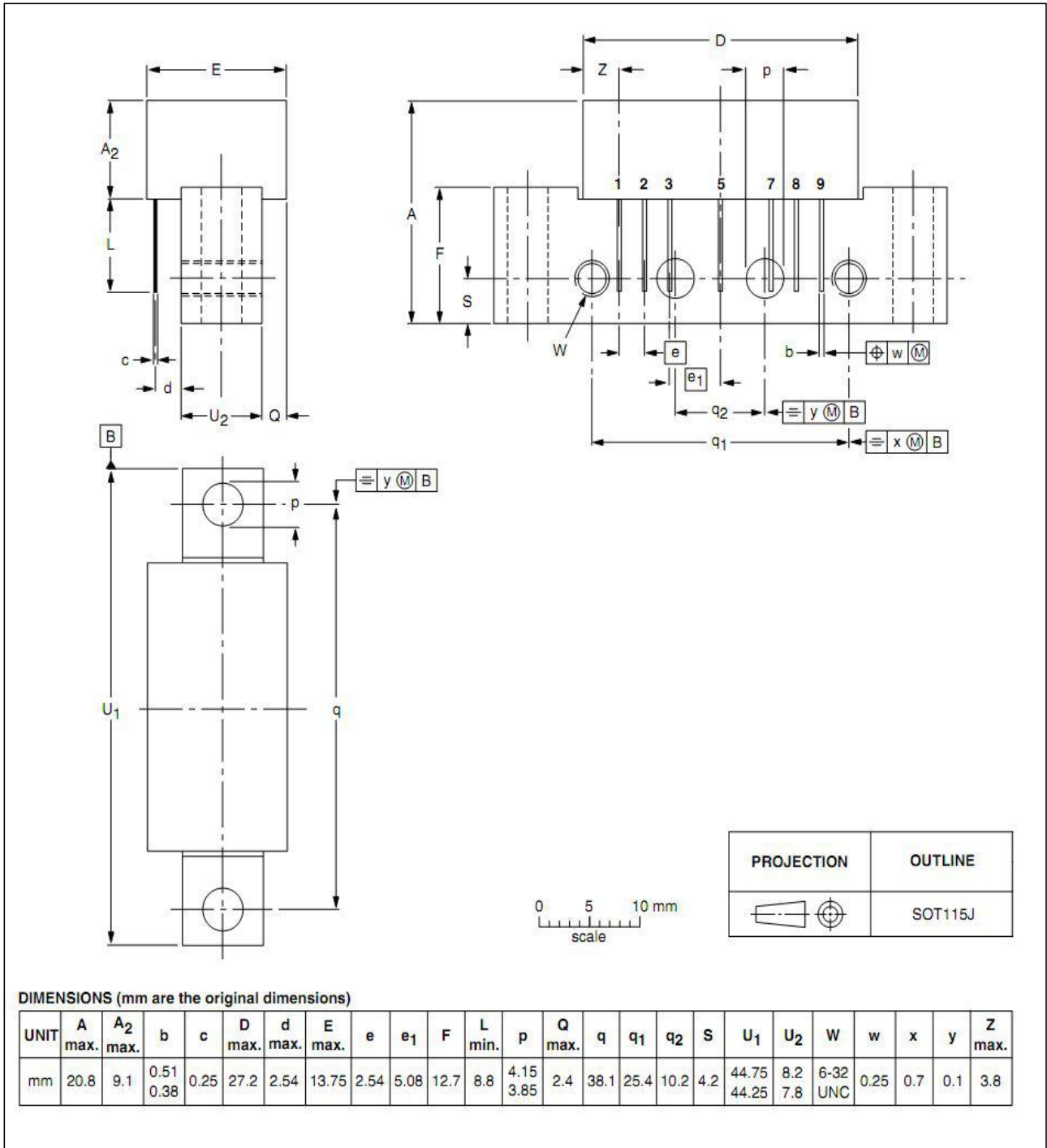
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★ PACKAGE OUTLINE

Rectangular single-ended package; aluminium flange; 2 vertical mounting holes;

2 x 6-32 UNC and 2 extra horizontal mounting holes; 7 gold-plated in-line leads

SOT115J



UNIT: mm