

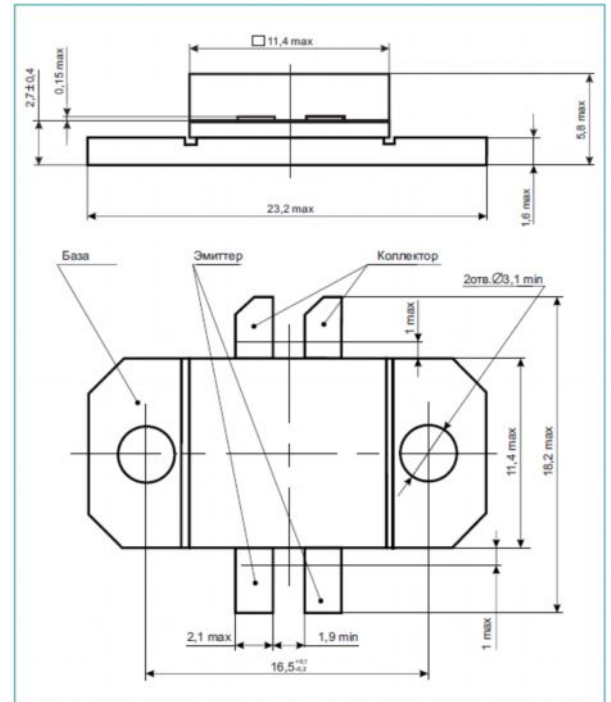
NPN SILICON RF POWER TRANSISTOR

Designed for operation in ultra - linear
Class A low and medium-power amplifiers
of TV transmitters (Band IV – V)

- Output power = 25 W (PEP), $f = 860$ MHz, $V_{CC} = 28$ V
- Power gain = 8 dB (min)
- 3 Tone IMD = -45 dB (max)

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector-Emitter Voltage	V_{CER}	50	V
Emitter-Base Voltage	V_{EBO}	3	V
Collector Current	I_C	15	A
Operating Junction Temperature	T_j	+200	°C
Storage Temperature Range	T_{stg}	-65 to +150	°C
Thermal Resistance (junction to case)	$R_{\theta JC}$	1.7	°C/W
Total Power Dissipation, $T_C = 25$ °C	P_D	103	W



Case KT-44

FUNCTIONAL TESTS

Characteristics	Symbol	Value			Unit
		min	typ	max	
Common-Emitter Amplifier Power Gain ($V_{CC} = 28$ V, $P_{out} = 25$ W PEP, $f = 860$ MHz)	G_P	8			dB
Intermodulation Distortion ⁽²⁾ ($V_{CC} = 28$ V, $P_{out} = 25$ W PEP, $f = 860$ MHz)	3 Tone IMD			-45	dB

NOTE: Three-tone test method (vision carrier: -8dB, sound carrier: -7dB, sideband carrier: -16dB)

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Specification is subject to change without notice