New Jersey Semi-Conductor Products, Inc.

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*UTV020* 

2 Watts, 25 Volts, Class A UHF Television - Band IV & V

GENI The UT Watt Pea Metaliza supreme	<b>ERAL DESCRIPTION</b> V 020 is a COMMON EMITTER tran ak, Class A, RF Output Power over th tition and Diffused Ballasting are used ruggedness.	CASE OUTLINE 55FT, STYLE 2	
ABSO	LUTE MAXIMUM RATI	NGS	
Maximu	m Power Dissipation @ 25°C	17 Watts	
Maximu	m Voltage and Current		
BVces	Collector to Emitter Voltage	45 Volts	
BVceo	Collector to Emitter Voltage	25 Volts	
BVebo	Emitter to Base Voltage	4.0 Volts	
Ic	Collector Current	1.2 Amps	
Maximu	m Temperatures		
Storage Temperature		- 65 to + 150°C	
Operating Junction Temperature		+ 200°C	

## ELECTRICAL CHARACTERISTICS @ 25 °C

SYMBOL	CHARACTERISTICS	TEST CONDITIONS	MIN	ТҮР	MAX	UNITS
Pout Pin Pg IMD <sup>1</sup> VSWR <sub>1</sub>	Power Out - Pk Sync Power Input Power Gain Intermodulation Distortion Load Mismatch Tolerance	F = 470 - 860  MHz Vcc = 25 Volts Ic = 410 mA Pref = 2.0 Watts F = 860 MHz	2.0	12 -60	0.2 30:1	Watts Watts dB dB

LVceo BVces BVebo h <sub>FE</sub>	Collector to Emitter Breakdown Collector to Base Breakdown Emitter to Base Breakdown Current Gain	Ic = 40 mA Ic = 10 mA Ie = 1 mA Vce = 5 V, 250mA	26 45 4.0 10			Volts Volts Volts
Сов Өјс	Output Capacitance Thermal Resistance	Vcb = 20 V, F = 1 MHz $Tc = 25^{\circ}C$		8.0	10	pF °C/W

Note 1: F1=860 MHz, F2=863.5 MHz, F3=864.5 Mhz

European test method, Vision = - 8dB, Sideband= - 16dB, Sound = -7 dB



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However, NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that datasheets are current before placing orders.

## **Quality Semi-Conductors**