## **New Jersey Semi-Conductor Products, Inc**

# **BLV20**

#### DESCRIPTION

The BLV20 is an N-P-N silicon planar epitaxial transistor intended for use in class-A, B and C operated HF and VHF transmitters with a nominal supply voltage of 28 V. The transistor is resistance stabilized and is guaranteed to withstand severe load mismatch conditions

It has a 3/8" flange envelope with aceramic cap. All leads are isolated from the flange. QUICK REFERENCE DATA

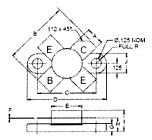
R.F. performance up to T<sub>h</sub> = 25  $^{\circ}$ C in an unneutralized common-emitter

class-B circuit

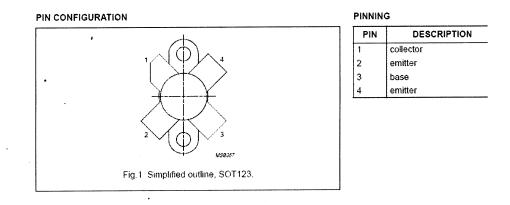
MODE OF	V <sub>CE</sub>	f	P <sub>L</sub>	G <sub>p</sub>	η
OPERATION	V	MHz	W	dB	%
C.W.	28	175	8	> 12	> 65

### CHARACTERISTICS Tc = 25 °C

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS	
BVCBO	I <sub>C</sub> = 200 mA			65			V
BV <sub>CES</sub>	I <sub>c</sub> = 2.0 mA			65			v
BVCEO	I <sub>C</sub> = 10 mA			35			V
BVEBO	I <sub>E</sub> = 1.0 mA		•	4.0			V
Ісво	V <sub>CB</sub> = 36 V		2 / 1,00 million and an a 10 10 million			1.0	mA
h <sub>FE</sub>	V <sub>CE</sub> = 5.0 V	I <sub>C</sub> = 400 mA		10		100	
Cc	V <sub>C5</sub> = 28 V		f = 1.0 MHz		10		pF
PG	V <sub>CC</sub> = 28 V	Pout = 8.0 W	f = 175 MHz	12	60		'd₿ %
P <sub>G</sub> ղշ	V <sub>CC</sub> = 28 V	P <sub>OUT</sub> = 8.0 W	f = 175 MHz	12	60		



ЫМ	MINIMUM incres / mm	MAXIMUM hotes / mm
A	220 / 5.59	.230 / 5.84
8	.785 / 19.94	
C	720 / 19.29	.730 / 18.54
0	970 / 24 64	.980 / 24.89
ε		.385 / 9.78
F	.004 / 0.10	.008 / 0.15
G	055 / 2.16	.105 ( 2.87
н	150 / 4.05	.190 ( 4.57
1		.290 / 7.11
3	240 / 6,10	.255 / 6.46



PRODUCT SAFETY This device incorporates beryllium oxide, the dust of which is toxic. The device is entire safe provided that the BeO disc is not damaged.

NJS reserves the right to make changes without further notice to any products herein for any reason. NJS does not assume any liability arising out of the application or use of any product or circuit described herein; neither does it convey any license under its patent rights nor the rights of others. "Typical" parameters, which may be provided in NJS data sheets and/or specifications, can vary in different applications, and actual performance may vary over time. All operating parameters, including "Typical" parameters must be validated for each user application by the users technical resources. Further, it is strongly advised that all customers perform a complete RF evaluation of this device prior to implementing into production.