

# Central<sup>TM</sup> Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

PN6119-18R  
PN6120-18R

PNPN SILICON  
PROGRAMMABLE UJT

JEDEC TO-92-18R CASE (AGK)

## DESCRIPTION

The CENTRAL SEMICONDUCTOR PN6119-18R, PN6120-18R types are silicon PNP programmable unijunction transistors designed for pulse and oscillator applications. These devices are designed to be exact pin for pin replacements for the 2N6119, 2N6120 respectively, in an epoxy case.

## MAXIMUM RATINGS (T<sub>A</sub>=25°C)

	SYMBOL		UNIT
Gate-Cathode Forward Voltage	V <sub>GKF</sub>	40	V
Anode-Cathode Voltage	V <sub>AK</sub>	±40	V
Gate-Anode Reverse Voltage	V <sub>GAR</sub>	40	V
Gate-Cathode Reverse Voltage	V <sub>GKR</sub>	5.0	V
DC Forward Anode Current	I <sub>T</sub>	300	mA
DC Gate Current	I <sub>G</sub>	±50	mA
Peak Repetitive Forward Current (PW=10μs)	I <sub>TRM</sub>	8.0	A
Peak Repetitive Forward Current (PW=100μs)	I <sub>TRM</sub>	5.0	A
Power Dissipation	P <sub>D</sub>	400	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>STG</sub>	-65 TO +150	°C

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	PN6119-18R		PN6120-18R		UNIT
		MIN	MAX	MIN	MAX	
I <sub>P</sub>	V <sub>S</sub> =10V, R <sub>G</sub> =1.0MΩ		2.0		0.15	μA
I <sub>P</sub>	V <sub>S</sub> =10V, R <sub>G</sub> =10kΩ		5.0		1.0	μA
V <sub>T</sub>	V <sub>S</sub> =10V, R <sub>G</sub> =1.0MΩ	0.2	1.6	0.2	0.6	V
V <sub>T</sub>	V <sub>S</sub> =10V, R <sub>G</sub> =10kΩ	0.2	1.6	0.2	0.6	V
I <sub>V</sub>	V <sub>S</sub> =10V, R <sub>G</sub> =1.0MΩ		50		25	μA
I <sub>V</sub>	V <sub>S</sub> =10V, R <sub>G</sub> =10kΩ	70		25		μA
I <sub>V</sub>	V <sub>S</sub> =10V, R <sub>G</sub> =200Ω	1.5		1.0		mA
I <sub>GAO</sub>	V <sub>S</sub> =40V		10		10	nA
I <sub>GAO</sub>	V <sub>S</sub> =40V, T <sub>A</sub> =75°C		100		100	nA
I <sub>GKS</sub>	V <sub>S</sub> =40V		100		100	nA
V <sub>F</sub>	I <sub>F</sub> =50mA		1.0		1.0	V
V <sub>O</sub>	V <sub>B</sub> =20V, C <sub>C</sub> =0.2μF	9.0		9.0		V
t <sub>r</sub>	V <sub>B</sub> =20V, C <sub>C</sub> =0.2μF		80		80	ns