

CentralTM 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 ($T_A=25^\circ\text{C}$)

	SYMBOL		UNIT
Gate-Cathode Forward Voltage	V_{GKF}	40	V
Anode-Cathode Voltage	V_{AK}	± 40	V
Gate-Anode Reverse Voltage	V_{GAR}	40	V
Gate-Cathode Reverse Voltage	V_{GKR}	5.0	V
DC Forward Anode Current	I_T	300	mA
DC Gate Current	I_G	± 50	mA
Peak Repetitive Forward Current (PW=10 μ s)	I_{TRM}	8.0	A
Peak Repetitive Forward Current (PW=100 μ s)	I_{TRM}	5.0	A
Power Dissipation	P_D	400	mW
Operating and Storage Junction Temperature	T_J, T_{STG}	-65 TO +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	PN6119-18R		PN6120-18R		UNIT
		MIN	MAX	MIN	MAX	
I_P	$V_S=10\text{V}, R_G=1.0\text{M}\Omega$		2.0		0.15	μA
I_P	$V_S=10\text{V}, R_G=10\text{k}\Omega$		5.0		1.0	μA
V_T	$V_S=10\text{V}, R_G=1.0\text{M}\Omega$	0.2	1.6	0.2	0.6	V
V_T	$V_S=10\text{V}, R_G=10\text{k}\Omega$	0.2	1.6	0.2	0.6	V
I_V	$V_S=10\text{V}, R_G=1.0\text{M}\Omega$		50		25	μA
I_V	$V_S=10\text{V}, R_G=10\text{k}\Omega$	70		25		μA
I_V	$V_S=10\text{V}, R_G=200\Omega$	1.5		1.0		mA
I_{GA0}	$V_S=40\text{V}$		10		10	nA
I_{GA0}	$V_S=40\text{V}, T_A=75^\circ\text{C}$		100		100	nA
I_{GKS}	$V_S=40\text{V}$		100		100	nA
V_F	$I_F=50\text{mA}$		1.0		1.0	V
V_O	$V_B=20\text{V}, C_C=0.2\mu\text{F}$	9.0		9.0		V
t_r	$V_B=20\text{V}, C_C=0.2\mu\text{F}$		80		80	ns