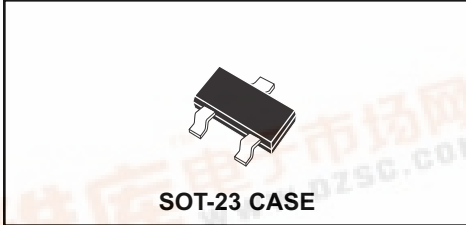


CMPP6027
CMPP6028

**SURFACE MOUNT
PROGRAMMABLE UNIJUNCTION
SILICON TRANSISTOR**



Central™

Semiconductor Corp.

DESCRIPTION:

The Central Semiconductor CMPP6027, CMPP6028 types are Silicon Programmable Unijunction Transistors, manufactured in a surface mount SOT-23 package, designed for adjustable (programmable) characteristics such as, Valley Current (I_V), Peak Current (I_P), and Intrinsic Standoff Ratio (η).

**MARKING CODE: CMPP6027 - P27
CMPP6028 - P28**

NOTE: Reverse Lead Codes Available, Add "R" to the end of the Part #.

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Gate-Cathode Forward Voltage
Gate-Cathode Reverse Voltage
Gate-Anode Reverse Voltage
Anode-Cathode Voltage
Peak Non-Repetitive Forward Current ($t=10\mu\text{s}$)
Peak Repetitive Forward Current ($t=20\mu\text{s}$, D.C.=1.0%)
Peak Repetitive Forward Current ($t=100\mu\text{s}$, D.C.=1.0%)
DC Forward Anode Current
DC Gate Current
Power Dissipation
Storage Temperature
Operating Junction Temperature

SYMBOL		UNITS
V _{GKF}	40	V
V _{GKR}	5.0	V
V _{GAR}	40	V
V _{AK}	40	V
I _{TSM}	5.0	A
I _{TRM}	2.0	A
I _{TRM}	1.0	A
I _T	150	mA
I _G	50	mA
P _D	350	mW
T _{stg}	-55 to +150	°C
T _J	-50 to +100	°C

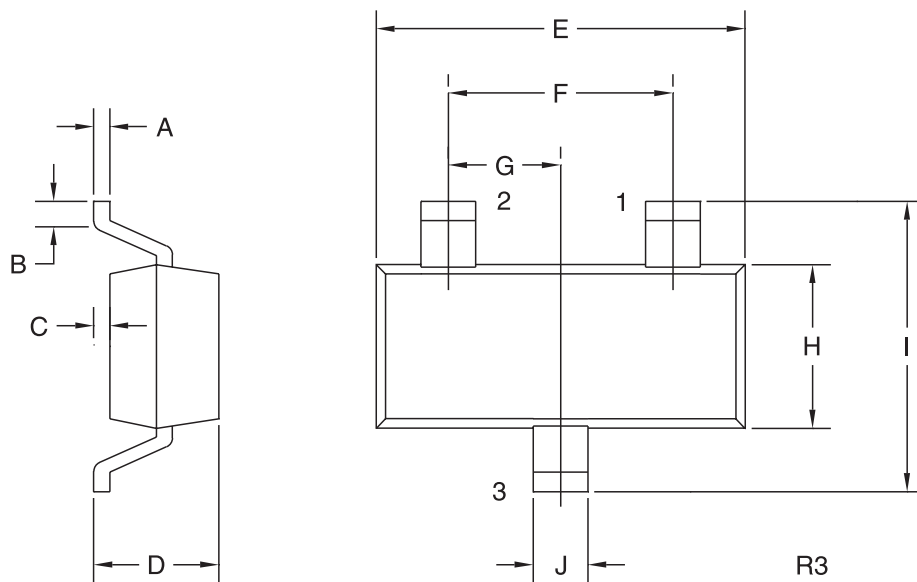
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	CMPP6027		CMPP6028		UNITS
		MIN	MAX	MIN	MAX	
I _{GAO}	V _S =40V		10		10	nA
I _{GKS}	V _S =40V		50		50	nA
I _P	V _S =10V, R _G =1.0MΩ		2.0		0.15	μA
I _P	V _S =10V, R _G =10kΩ		5.0		1.0	μA
I _V	V _S =10V, R _G =1.0MΩ		50		25	μA
I _V	V _S =10V, R _G =10kΩ	70		25		μA
I _V	V _S =10V, R _G =200Ω	1.5		1.0		mA
V _T	V _S =10V, R _G =1.0MΩ	0.2	1.6	0.2	0.6	V
V _T	V _S =10V, R _G =10kΩ	0.2	0.6	0.2	0.6	V
V _F	I _F =50mA		1.5		1.5	V
V _O	V _B =20V, C _C =0.2μF	6.0		6.0		V
t _r	V _B =20V, C _C =0.2μF		80		80	ns

R1 (29-April 2005)

**SURFACE MOUNT
PROGRAMMABLE UNIJUNCTION
SILICON TRANSISTOR**

SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:
STANDARD *REVERSE
 1) CATHODE 1) ANODE
 2) ANODE 2) CATHODE
 3) GATE 3) GATE

MARKING CODE:
CMPP6027 - P27
CMPP6028 - P28

* Reverse Lead Code Available,
 Add "R" to the end of the Part #.

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)