

New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.
 SPRINGFIELD, NEW JERSEY 07081
 U.S.A.

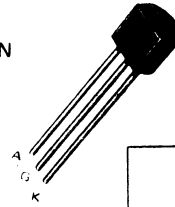
TELEPHONE: (201) 376-2922
 (212) 227-6005
 FAX: (201) 376-8960

2N6027

2N6028

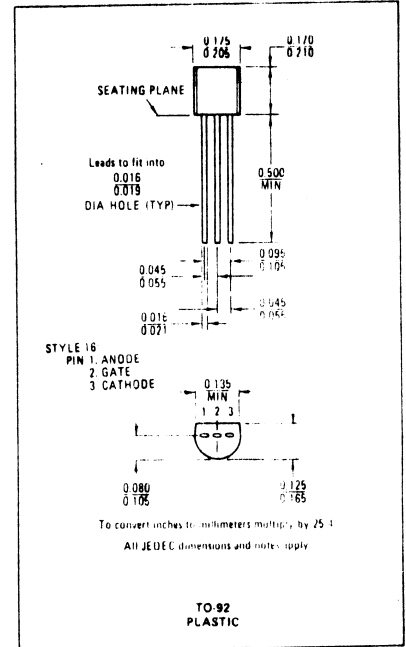
SILICON PROGRAMMABLE UNIJUNCTION TRANSISTORS

40 VOLTS
 375 mW



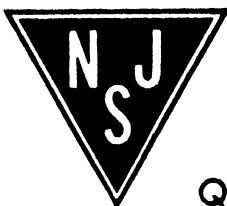
MAXIMUM RATINGS			
Rating	Symbol	Value	Unit
Power Dissipation (1) Derate Above 25°C	P _F 1/θ _{JA}	375 5.0	mW mW/°C
DC Forward Anode Current (2) Derate Above 25°C	I _T	200 2.67	mA mA/°C
DC Gate Current	I _G	±50	mA
Repetitive Peak Forward Current 100 μs Pulse Width, 1.0% Duty Cycle 20 μs Pulse Width, 1.0% Duty Cycle	I _{TRM}	1.0 2.0	Amp Amp
Non-Repetitive Peak Forward Current 10 μs Pulse Width	I _{TSM}	5.0	Amp
Gate to Cathode Forward Voltage	V _{GKF}	40	Volt
Gate to Cathode Reverse Voltage	V _{GKR}	-5.0	Volt
Gate to Anode Reverse Voltage	V _{GAR}	40	Volt
Anode to Cathode Voltage	V _{AK}	±40	Volt
Operating Junction Temperature Range	T _J	-50 to +100	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

* Indicates JEDEC Registered Data
 (1) JEDEC Registered Data is 300 mW, derating at 4.0 mW/°C.
 (2) JEDEC Registered Data is 150 mA.



ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

Characteristic	Figure	Symbol	Min	Typ	Max	Unit
Peak Current (V _S = 10 Vdc, R _G = 1.0 MΩ)	2, 9, 11	I _p	-	1.25	2.0	μA
(V _S = 10 Vdc, R _G = 10 k ohms)			-	0.08	0.15	
(V _S = 10 Vdc, R _G = 10 k ohms)			-	4.0	5.0	
(V _S = 10 Vdc, R _G = 10 k ohms)			-	0.70	1.0	
Offset Voltage (V _S = 10 Vdc, R _G = 1.0 MΩ)	1	V _T	0.2	0.70	1.6	Volts
(V _S = 10 Vdc, R _G = 10 k ohms)			0.2	0.50	0.6	
(V _S = 10 Vdc, R _G = 10 k ohms)	(Both Types)		0.2	0.35	0.6	
Valley Current (V _S = 10 Vdc, R _G = 1.0 MΩ)	1, 4, 5	I _V	-	18	50	μA
(V _S = 10 Vdc, R _G = 10 k ohms)			-	18	25	
(V _S = 10 Vdc, R _G = 10 k ohms)			70	270		
(V _S = 10 Vdc, R _G = 10 k ohms)			25	270		
(V _S = 10 Vdc, R _G = 200 Ohms)			1.5	-	-	mA
(V _S = 10 Vdc, R _G = 200 Ohms)			1.0	-	-	
Gate to Anode Leakage Current (V _S = 40 Vdc, T _A = 25°C, Cathode Open) (V _S = 40 Vdc, T _A = 75°C, Cathode Open)		I _{GAO}	-	1.0 3.0	10	nA dc
Gate to Cathode Leakage Current (V _S = 40 Vdc, Anode to Cathode Shorted)		I _{GKS}	-	5.0	50	nA dc
Forward Voltage (I _F = 50 mA Peak)	1, 6	V _F	-	0.8	1.5	Volts
Peak Output Voltage (V _B = 20 Vdc, C _C = 0.2 μF)	3, 7	V _O	6.0	11		Volts
Pulse Voltage Rise Time (V _B = 20 Vdc, C _C = 0.2 μF)	3	t _r	-	40	80	ns



Quality Semi-Conductors