

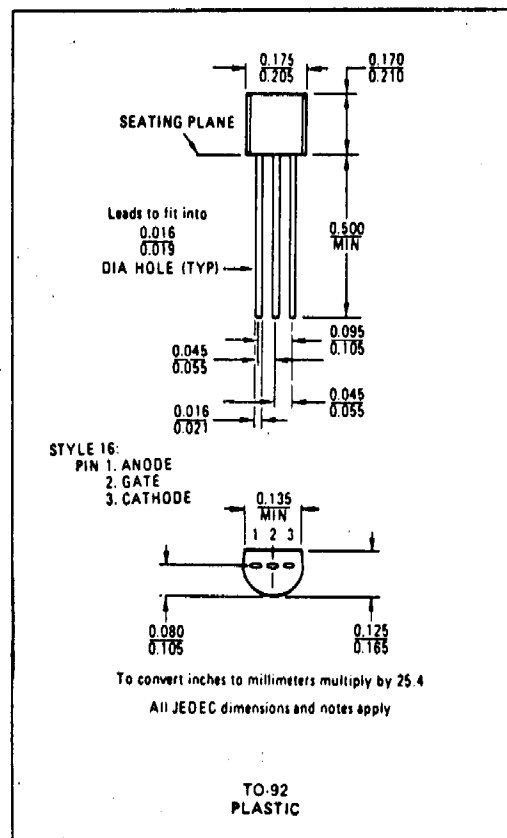
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PN6116
SILICON PROGRAMMABLE
UNI-JUNCTION TRANSISTOR

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



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

Characteristic	Symbol	Min	Typ	Max	Unit
• Peak Current (V _S = 10 Vdc, R _G = 1.0 MΩ) (V _S = 10 Vdc, R _G = 10 k ohms)	I _p	-	1.25 4.0	2.0 5.0	μA
• Offset Voltage (V _S = 10 Vdc, R _G = 1.0 MΩ) (V _S = 10 Vdc, R _G = 10 k ohms)	V _T	0.2 0.2	0.70 0.35	1.6 0.6	Volts
• Valley Current (V _S = 10 Vdc, R _G = 1.0 MΩ) (V _S = 10 Vdc, R _G = 10 k ohms) (V _S = 10 Vdc, R _G = 200 Ohms)	I _v	- 70 1.5	18 270 -	50 - -	μA mA
• 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 -	nAdc
Gate to Cathode Leakage Current (V _S = 40 Vdc, Anode to Cathode Shorted)	I _{GKS}	-	5.0	50	nAdc
• Forward Voltage (I _F = 50 mA Peak)	V _F	-	0.8	1.5	Volts
• Peak Output Voltage (V _B = 20 Vdc, C _C = 0.2 μF)	V _o	6.0	11	-	Volts
Pulse Voltage Rise Time (V _B = 20 Vdc, C _C = 0.2 μF)	t _r	-	40	80	ns

Quality Semi-Conductors