

Micro Commercial Components 20736 Marilla Street Chatsworth **Micro Commercial Components** CA 91311

Phone: (818) 701-4933 (818) 701-4939 1N4148

Features

- High Reliability
- Low Current Leakage
- Metalurgically Bonded Construction
- Moisture Sensitivity Level 1
- Marking: Cathode band and type number
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)

500mW High Speed **Switching Diode 100 Volt**

Maximum Ratings

- Operating Temperature: -65°C to +175°C
- Storage Temperature: -65°C to +175°C
- Maximum Thermal Resistance: 300K/W Junction To Ambient

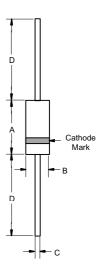
Electrical Characteristics @ 25 $^{\circ}$ C Unless Otherwise Specified

Reverse Voltage	V_R	75V		
Breakdown Voltage	V_{BR}	100V	I _R =100 μ A	
Average Forward Current	Io	150mA		
Power Dissipation	P _{TOT}	500mW		
Junction Temperature	T_J	175℃		
Peak Forward Surge Current	I _{FSM}	2.0A	$t_p = 1.0 \mu\mathrm{s}$	
Maximum Instantaneous Forward Voltage	V _F	1.0V	I _{FM} = 10mA	
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	25nA 5.0μA 50μA	V_R =20V; T_J = 25°C V_R =75V; T_J = 25°C V_R =20V; T_J =150°C	
Maximum Junction Capacitance	CJ	4.0pF	Measured at 1.0MHz, V _R =0V	
Maximum Reverse Recovery Time	T _{rr}	4.0ns	$I_F=10\text{mA}; V_R=6V$ $R_L=100\Omega$	

^{*}Pulse test: Pulse width 300 µsec, Duty cycle 2%

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 5.

DO-35



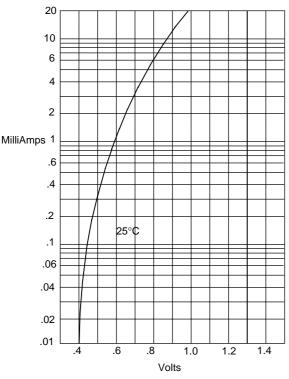
DIMENSIONS							
	INCHES		MM				
DIM	MIN	MAX	MIN	MAX	NOTE		
Α		.166	-	4.2			
В		.079		2.00			
С		.020		.52			
D	1.000		25.40				

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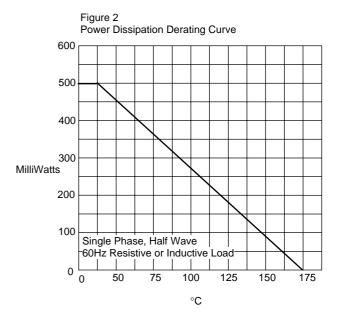


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Figure 1 Typical Forward Characteristics

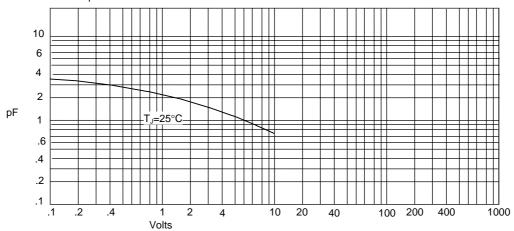


Instantaneous Forward Current - MilliAmperes *versus* Instantaneous Forward Voltage - Volts



Admissable Power Dissipation - MilliWatts versus Junction Temperature - $^{\circ}\text{C}$





Junction Capacitance - pF *versus* Reverse Voltage - Volts

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Figure 4
Typical Reverse Characteristics

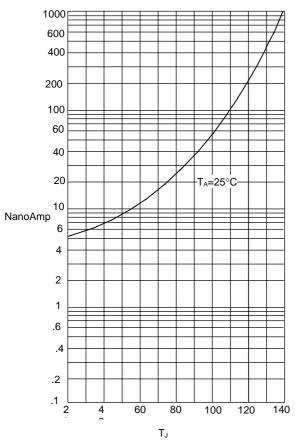


Figure 5
Peak Forward Surge Current

2400
2000
1600
1200
400
0
1 2 4 6 8 10 20 40 60 80 100

Cycles

Peak Forward Surge Current - Amperes *versus* Number Of Cycles At 60Hz - Cycles

Instantaneous Reverse Leakage Current - NanoAmperes versus Junction Temperature - $^{\circ}\text{C}$



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Ordering Information:

Device	Packing	
Part Number-TP	Tape&Reel: 10Kpcs/Reel	
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box	
Part Number-BP	Bulk: 100Kpcs/Carton	

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