

**Micro Commercial Components** 



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### Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant, See ordering information)
- RoHS Compliant. See ordering information)
  High Efficiency and High Current Capability
- Low Forward Voltage Drop and Low Power loss
- Metal Silicon junction, majority carrier conduction
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking : Cathode band and type number

### Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +125°C
- Typical Thermal Resistance: 50°C/W junction to Ambient
- For capacitive load. Derate current by 20%

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1N17	20V	14V	20V
1N18	30V	21V	30V
1N19	40V	28V	40V

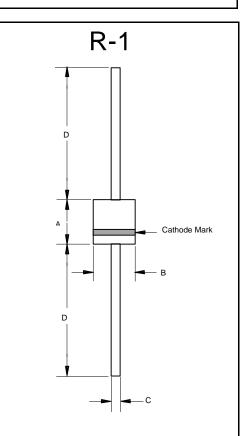
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Rectified Current	I <sub>(AV)</sub>	1.0A	$T_A = 90^{\circ}C$
Peak Forward Surge Current	I <sub>FSM</sub>	25A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 1N17 1N18 1N19	V <sub>F</sub>	0.45V 0.55V 0.60V	I <sub>FM</sub> = 1.0A; T <sub>C</sub> = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	R	0.5mA 10mA	$T_{\rm C} = 25^{\circ}{\rm C}$ $T_{\rm C} = 100^{\circ}{\rm C}$
Typical Junction Capacitance	CJ	110pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

# 1N17 THRU 1N19

### 1.0 Amp Schottky Barrier Rectifier 20 to 40 Volts



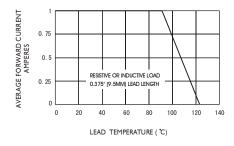
DIMENSIONS					
DIM	INCHES		ММ		
	MIN	МАХ	MIN	МАХ	NOTE
А	0.116	0.140	2.90	3.50	
В	0.091	0.102	2.30	2.60	
С	0.020	0.024	0.50	0.60	
D	0.787		20.00		

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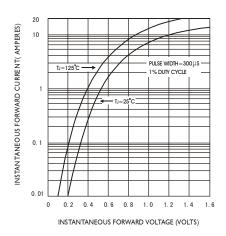
## 1N17 thru 1N19



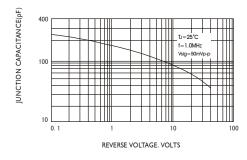
#### FIG. I-FORWARD CURRENT DERATING CURVE



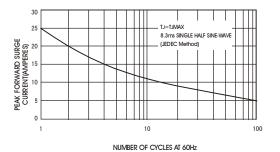
#### FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



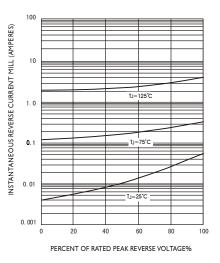
#### FIG.5-TYPICAL JUNCTION CAPACITANCE



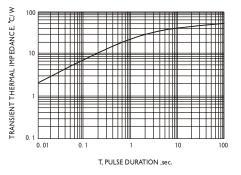
#### FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



#### FIG.4-TYPICAL REVERSE CHARACTERISTICS



#### FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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### **Ordering Information :**

Device	Packing		
Part Number-TP	Tape&Reel: 5Kpcs/Reel		
Part Number-AP	Ammo Packing: 3Kpcs/Ammo Box		

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