



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Micro Commercial Components



Micro Commercial Components  
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**1F1  
 THRU  
 1F7**

**Features**

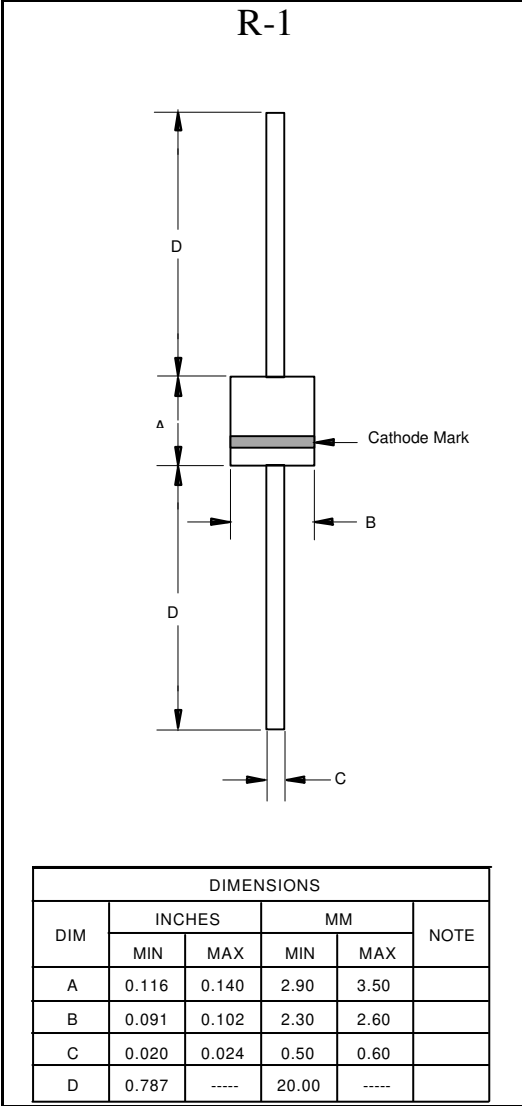
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking : Cathode band and type number
- Fast Switching for High Efficiency and Low Leakage
- Halogen free available upon request by adding suffix "-HF"

**1.0 Amp Fast  
 Recovery Plastic  
 Rectifier  
 50 to 1000 Volts**

**Maximum Ratings**

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- For capacitive load. Derate current by 20%
- Typical Thermal Resistance: 67°C/W Junction to Ambient.

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1F1	50V	35V	50V
1F2	100V	70V	100V
1F3	200V	140V	200V
1F4	400V	280V	400V
1F5	600V	420V	600V
1F6	800V	560V	800V
1F7	1000V	700V	1000V



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

Average Forward Current	$I_{F(AV)}$	1.0 A	$T_C = 55^\circ C$
Peak Forward Surge Current	$I_{FSM}$	30A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.3V	$I_{FM} = 1.0A;$ $T_C = 25^\circ C$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5.0µA 500uA	$T_C = 25^\circ C$ $T_C = 100^\circ C$
Typical Junction Capacitance	$C_J$	12pF	Measured at 1.0MHz, $V_R=4.0V$
Maximum Reverse Recovery Time	$t_{rr}$	150ns 250ns 500ns	$I_F=0.5A,$ $I_R=1A,$ $t_r=0.25A$
		1F1-1F4 1F5 1F6-1F7	

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

# 1F1 thru 1F7

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

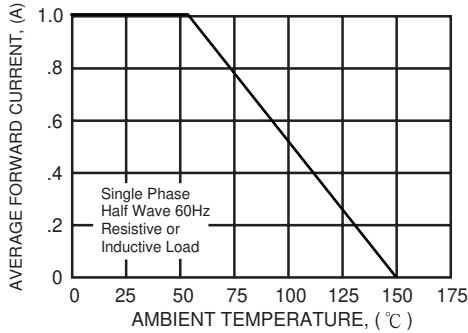


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

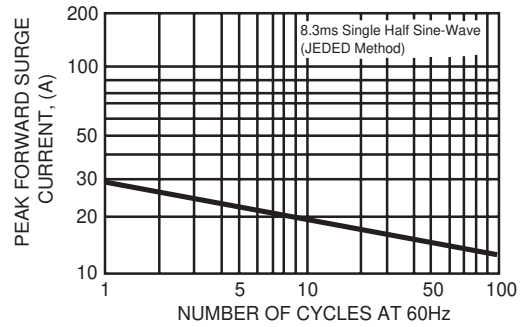


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

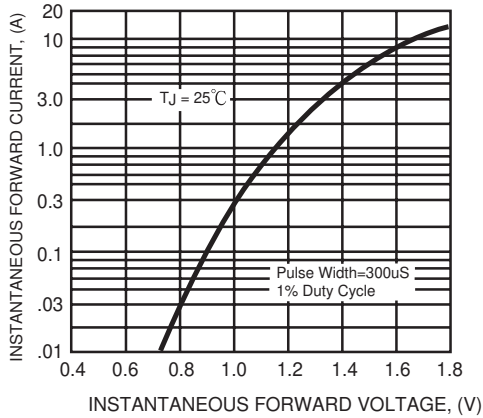


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

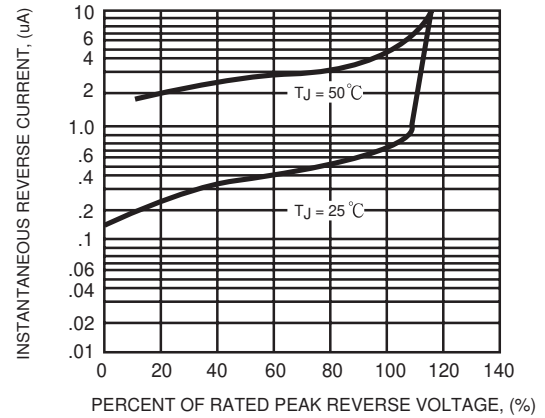


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

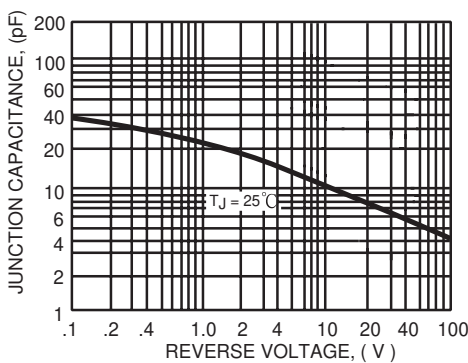
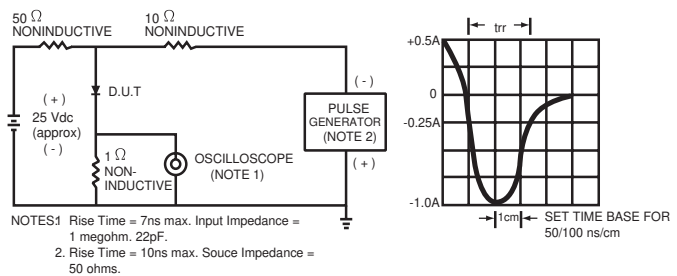


FIG. 6 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC





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## Ordering Information :

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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