

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"

num 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.

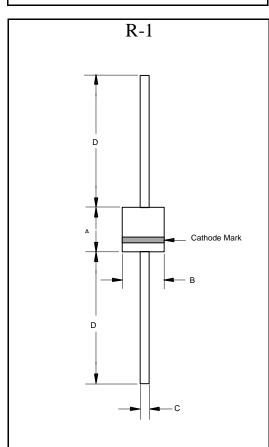
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1F1	50V	35V	50V
1F2	100V	70V	100V
1F3	200V	140V	200V
1F4	400V	280V	400V
1F5	600V	420V	600V
1F6	800V	560V	800V
1F7	1000V	700V	1000V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I _{F(AV)}	1.0 A	T _C = 55°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°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	12pF	Measured at 1.0MHz, V _R =4.0V
Maximum Reverse Recovery Time 1F1-1F4 1F5 1F6-1F7	t _{rr}	150ns 250ns 500ns	I _F =0.5A, I _R =1A, I _r =0.25A

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

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



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	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		



1F1 thru 1F7

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FIG. 1 - TYPICAL FORWARD CURRENT **DERATING CURVE** AVERAGE FORWARD CURRENT, (A) 1.0 .8 .6 .4 Single Phase Half Wave 60Hz .2 Resistive or Inductive Load 0 75 150 175 0 50 100 125

FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

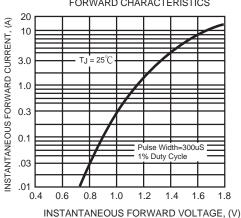


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

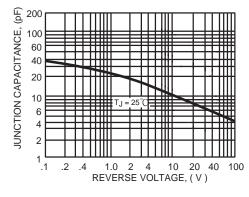


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

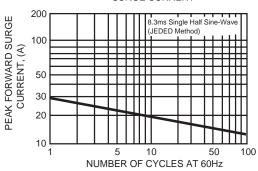


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

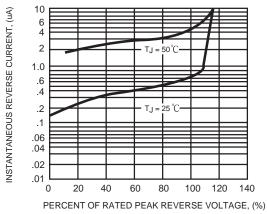
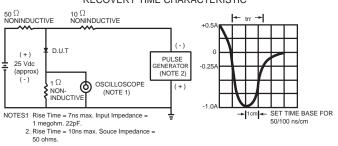


FIG. 6 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC





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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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