

#### **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Low Forward Voltage Drop
- Fast Reverse Recovery Time
- Planar Structure Die and Soft Recovery Characteristics

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Maximum Thermal Resistance: 2°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURS1060L	MURS1060L	600V	420V	600V

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

Average Rectified Forward Current	I <sub>F(AV)</sub>	10A	T <sub>C</sub> = 125°C
Peak Forward Surge Current	I <sub>FSM</sub>	100A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.1V(Typ) 1.3V(Max) 1.1V(Max)	I <sub>F</sub> =10A;T <sub>J</sub> =25°C I <sub>F</sub> =10A;T <sub>J</sub> =25°C I <sub>F</sub> =10A;T <sub>J</sub> =150°C
Maximum Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5μΑ 200μΑ	T <sub>J</sub> =25°C; T <sub>J</sub> =150°C
Typical Junction Capacitance	CJ	115pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V

## Dynamic Recovery Characteristics @ 25°C Unless Otherwise Specified

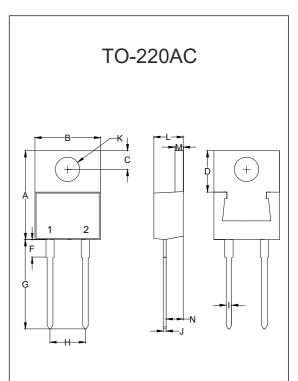
Reverse Recovery Time	t <sub>rr</sub>	40ns(Typ.) 75ns(Max.)	I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A; I <sub>RR</sub> =0.25A	
		160ns(Typ.) 250ns(Typ.)	T <sub>J</sub> =25°C T <sub>J</sub> =125°C	
Peak recovery current	I <sub>RRM</sub>	6.5A(Typ.) 10A(Typ.)	T <sub>J</sub> =25°C T <sub>J</sub> =125°C	$I_F = 10 \text{ A}$ $di_F/dt = 200 \text{ A/}\mu\text{s}$ $V_R = 200 \text{ V}$
Reverse recovery charge	Q <sub>rr</sub>	565nC(Typ.) 1250nC(Typ.)	T <sub>J</sub> =25°C T <sub>J</sub> =125°C	

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

#### Internal Structure



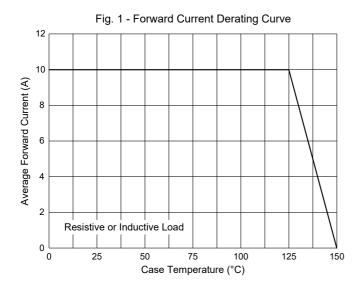
# 10 Amp FRED Rectifiers 600 Volts

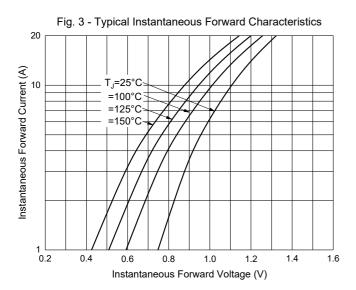


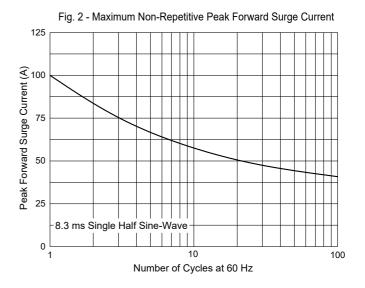
	DIMENSIONS				
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	0.560	0.625	14.22	15.88	
В	0.380	0.420	9.65	10.67	
С	0.100	0.135	2.54	3.43	
D	0.230	0.270	5.84	6.86	
F		0.250		6.35	
G	0.500	0.580	12.70	14.73	
Н	0.190	0.210	4.83	5.33	
ı	0.020	0.045	0.51	1.14	
J	0.012	0.025	0.30	0.64	
K	0.139	0.161	3.53	4.09	Ф
L	0.140	0.190	3.56	4.83	
М	0.045	0.055	1.14	1.40	
N	0.080	0.115	2.03	2.92	

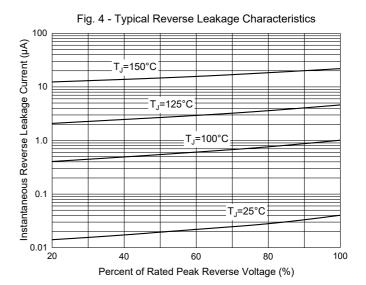


### **Curve Characteristics**











## **Ordering Information**

Device	Packing
Part Number-BP	Bulk:50pcs/Tube,1Kpcs/Box,5Kpcs/Carton

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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