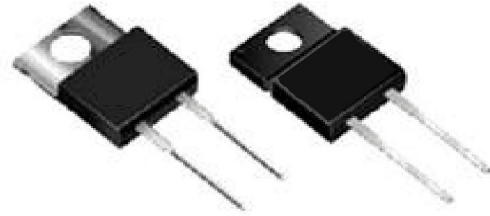


Features

- FRED (Planar) wafer construction
- Ultrafast recovery time
- Low forward voltage drop, low power losses
- High efficiency operation
- Plastic package has underwriters Laboratory Flammability Classification 94V-0



Package: TO-220-AC
MUR1520

ITO-220-AC
MUR1520F

Mechanical Data

- Case: Epoxy, Molded
- Weight: 1.9grams(approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 sec
- Shipped 50 units per plastic tube



Maximum Ratings & Electrical Characteristics

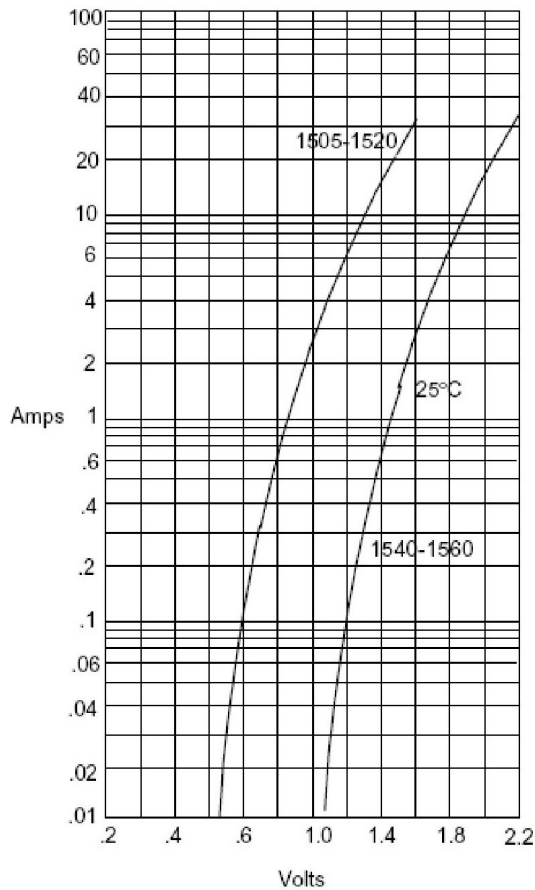
(TA=25°C unless otherwise noted)

PARAMETER		TEST CONDITIONS		SYMBOL	MUR1520(F)	UNIT
Maximum repetitive peak reverse voltage				V _{RRM}	200	V
Working peak reverse voltage				V _{RWM}	200	V
Maximum DC blocking voltage				V _{DC}	200	V
Maximum average forward rectified current at T _c =105°C total device per diode				I _F (AV)	15	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode				I _{FSM}	150	A
Voltage rate of change(rated V _R)				DV/dt	10000	V/us
Operating junction temperature range				T _J	—55 to+150	°C
Storage temperature range				T _{STG}	—55 to+150	°C
Maximum Reverse Recover Time (I _f =0.5Amp, I _R =1.0Amp,I _{rec} =0.25Amp)				T _{rr}	50	ns
Maximum instantaneous forward voltage per leg	I _F =15A	T _C =25°C	V _F	1.90	V	
	I _F =15A	T _C =125°C		1.80		
Maximum reverse current per leg at working peak Reverse voltage			I _R	10	uA	
				500	uA	
Thermal Characteristics T _A =25°C unless otherwise noted						
Symbol	Parameter		TYP.(TO-220-AC)		TYP.(ITO-220-AC)	Unit
R _{θJC}	Thermal Resistance, Junction to Case per Leg		2.0		4.0	°C /W
R _{θJA}	Thermal Resistance, Junction to Ambient per Leg		62.5		62.5	°C /W

Note: Pulse test:300us pulse width, duty cycle=2%

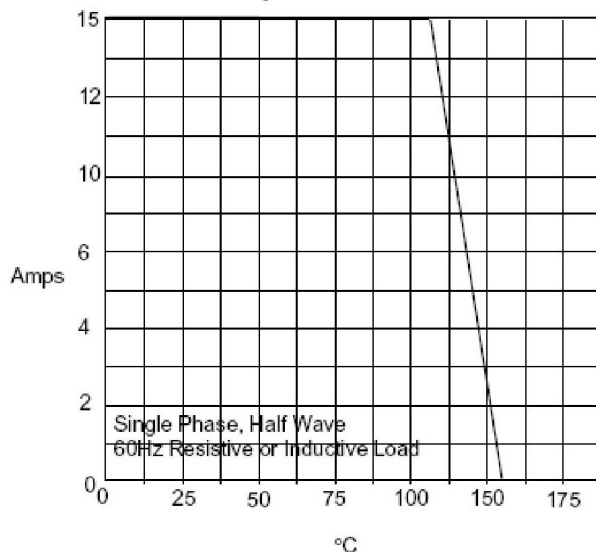
Ratings and Characteristics Curves

(T_A = 25°C unless otherwise noted)

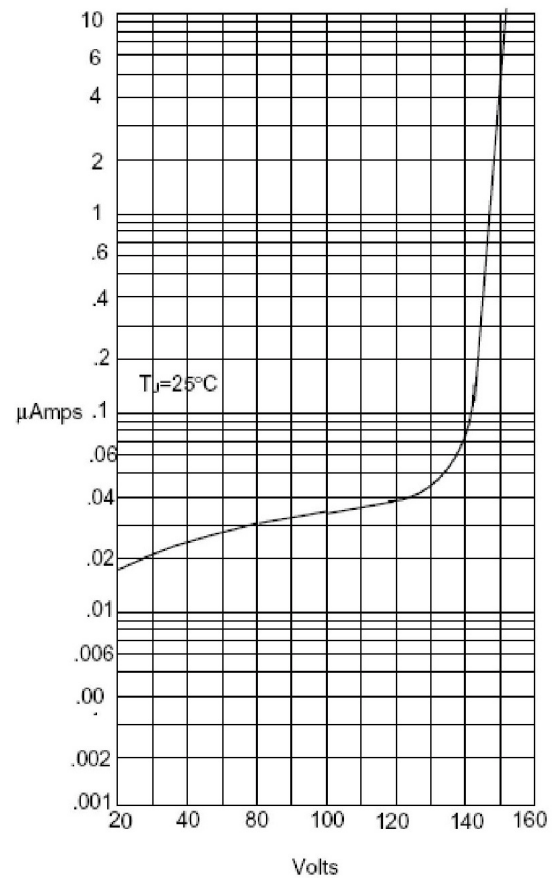


Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 3
Forward Derating Curve

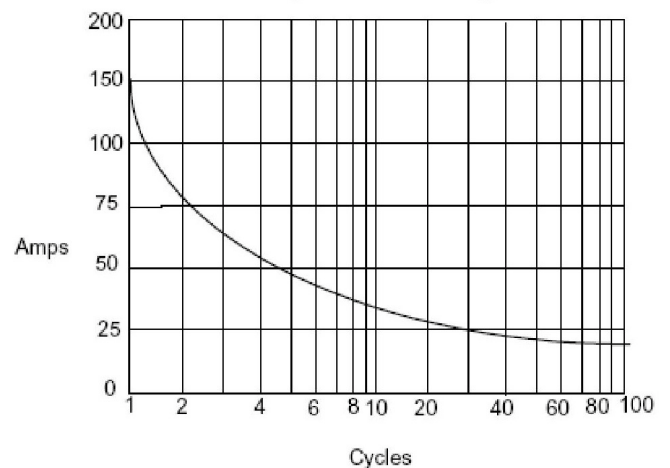


Average Forward Rectified Current - Amperes versus
Case Temperature - °C



Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 4
Maximum Non-Repetitive Forward Surge Current



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

Package Outline Dimensions

Unit: millimeters

TO-220-AC

ITO-220-AC

