

General Description

MURF1660 device optimized for recovery characteristics to improve efficiency in power supply applications.

Features

- High efficiency.
- High Reliability.
- RoHs Product.
- Soft recovery characteristics.
- Beautiful High Temperature Character.

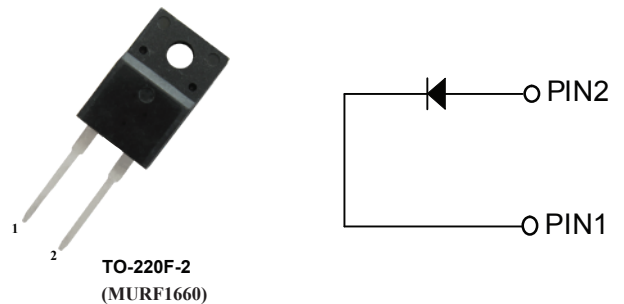
Product Summary

V _{RRM}	V _F	I _{F(AV)}
600V	1.7V	16A

Applications

- High voltage high frequency switching mode power supplies.
- High voltage high frequency power factor correctors.

TO-220F-2 Pin Configuration



Absolute Maximum Ratings

Symbol	Parameter	Rating	Units
V _{RRM}	Peak Repetitive Reverse Voltage	600	V
I _{F(AV)}	Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% duty cycle	16	A
T _{RR}	Reverse Recovery Time(I _F =0.5A ,I _R =1A ,I _{REC} =0.25A)	50	nS
I _{FSM}	Forward Peak Surge Current(Rated Load 8.3ms Half Mssine Wave-According to JEDEC Method)	135	A
dv/dt	Voltage rate of change (Rated VR)	10000	V/uS
I _{RRM}	Peak Repetitive Reverse Surge Current (2uS,1Khz)	0.5	A
T _J	Operating Junction Temperature	-40 to 150	°C
T _{STG}	Storage Temperature	-40 to 150	°C

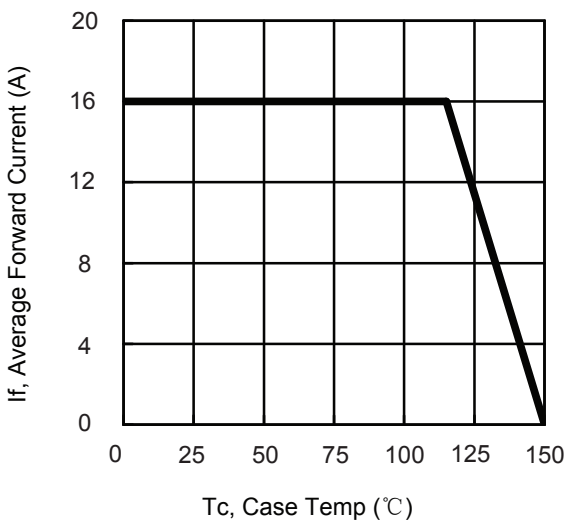
Thermal Data

Symbol	Parameter	Typ.	Max.	Unit
R _{θJC}	Typical Thermal Resistance(per leg) Package =ITO-220AC	4	---	°C/W

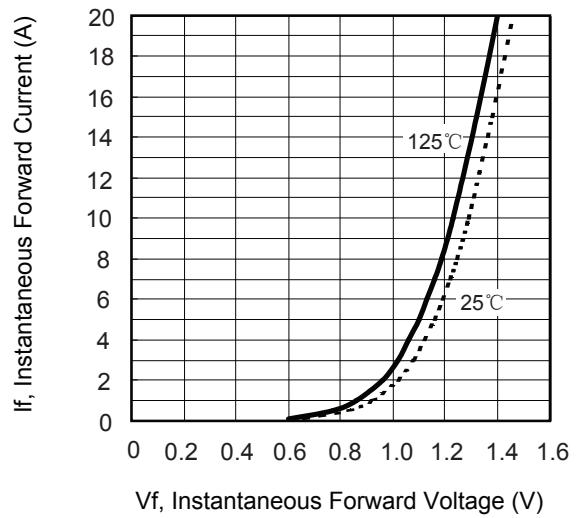
Electrical Characteristics

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
V _F	Forward Voltage Drop per diode	I _F =16A, T _J =25°C (IFAV=16Ax1)	---	1.4	1.7	V
		I _F =16A, T _J =125°C (IFAV=16Ax1)	---	---	1.3	
I _R	Reverse Leakage Current per diode	T _J =25°C (VR=VRRM)	---	---	0.05	mA
		T _J =125°C (VR=VRRM)	---	---	25	

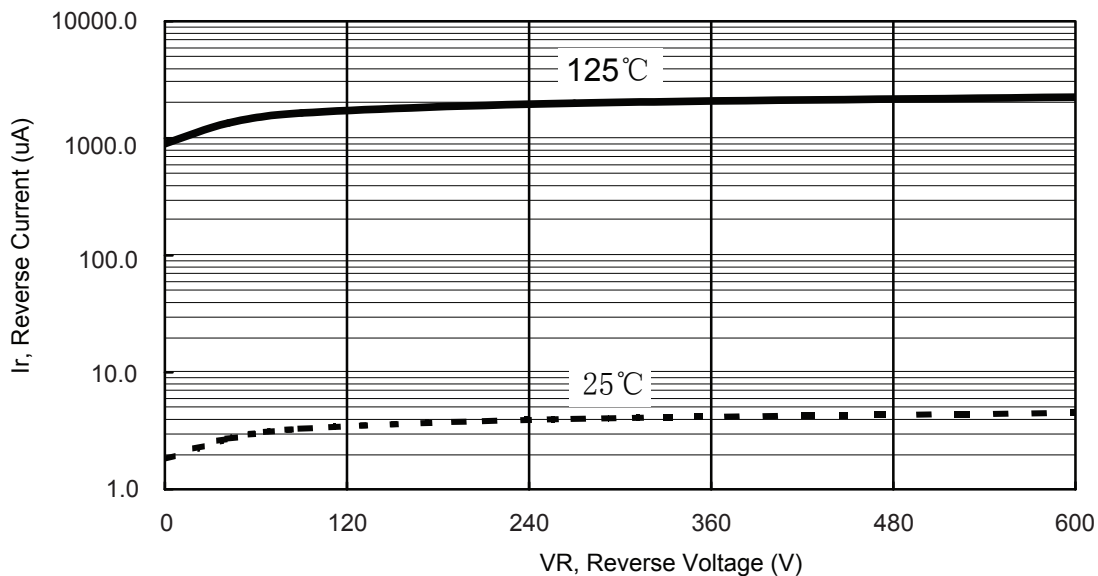
Characteristic Curves



Current derating curve, per element



The forward voltage and forward current curve



The reverse leak current and the reverse voltage (single-device) curve

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