

/ Descriptions

WR0553DF

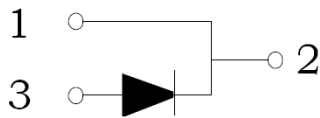
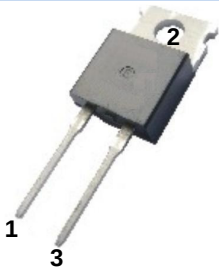
Ultrafast Recovery Diode in a TO-220AC Plastic Package.

/ Features

Silicon epitaxial process to produce ultrafast recovery diode with low reverse leakage current and high reliability.

/ Applications

For high frequency, high voltage, high current rectifier diode, freewheeling diode.

/ Equivalent Circuit**/ Pinning**

PIN1 2 Cathode

PIN 3 Anode

/ h_{FE} Classifications & Marking

See Marking Instructions

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	600	V
RMS Voltage	V_{RMS}	420	V
DC Blocking Voltage	V_{DC}	600	V
Average Forward Current	I_F	1×10	A
Peak forward surge current	I_{FSM}	100	A
Typical Thermal Resistance Junction to Case	$R_{\theta Jc}$	1.5	°C/W
Junction Temperature Range	T_J	150	°C
Storage Temperature Range	T_{stg}	-55 150	°C

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_R	$I_R=1mA$	600			V
Forward Voltage	V_F	$I_F=2.0A$ $T_C=25$		1.0	1.2	V
		$I_F=2.0A$ $T_C=150$		0.73	1.0	
		$I_F=10A$ $T_C=25$		1.3	1.5	
		$I_F=10A$ $T_C=150$		1.1	1.2	
Instantaneous Reverse Current(Note1)	I_R	$V_R=600V$ $T_a=25$			10	μA
		$V_R=480V$ $T_a=150$			100	
		$V_R=600V$ $T_a=150$			500	
Reverse Recovery Time	t_{rr}	$I_F=0.5A$ $I_R=1.0A$ $I_{RR}=0.25A$			50	ns

2Notes

1.

effect.

2.

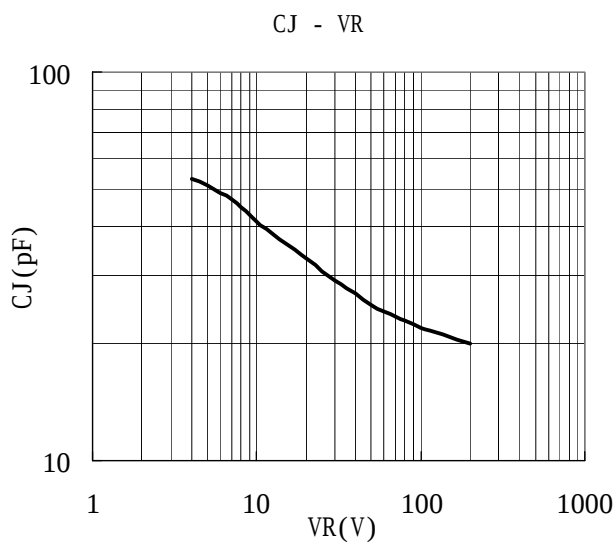
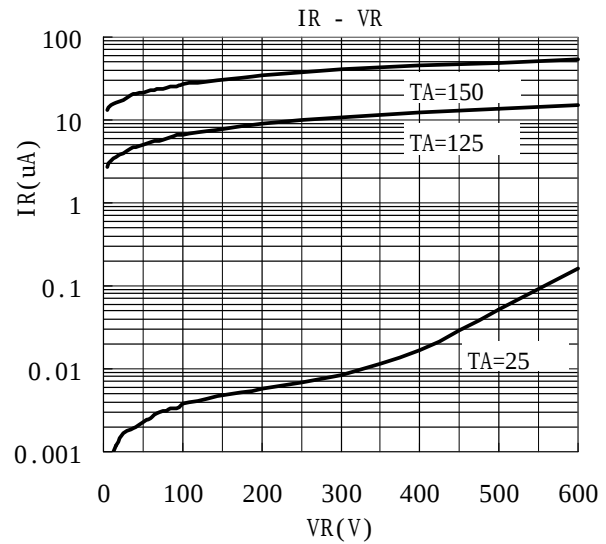
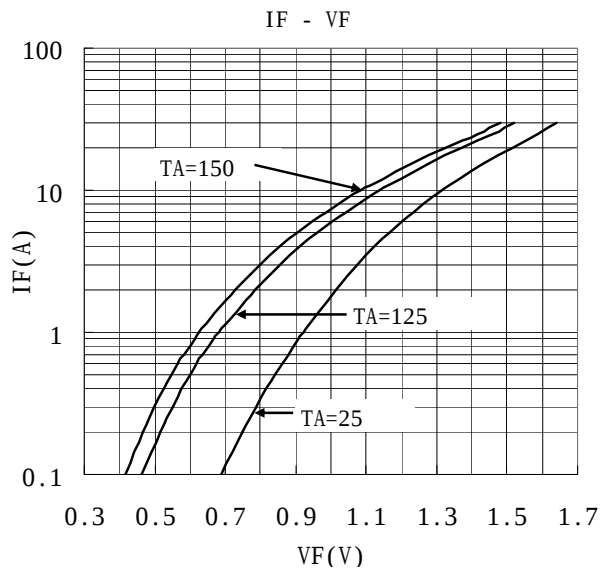
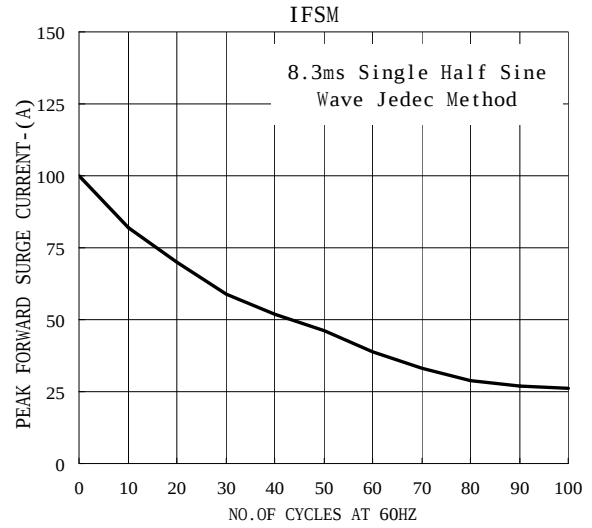
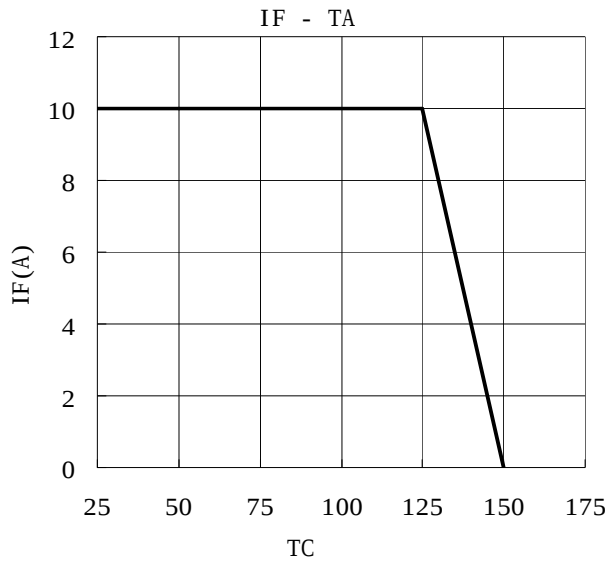
single chip

2Short duration pulse test used to minimize self-heating

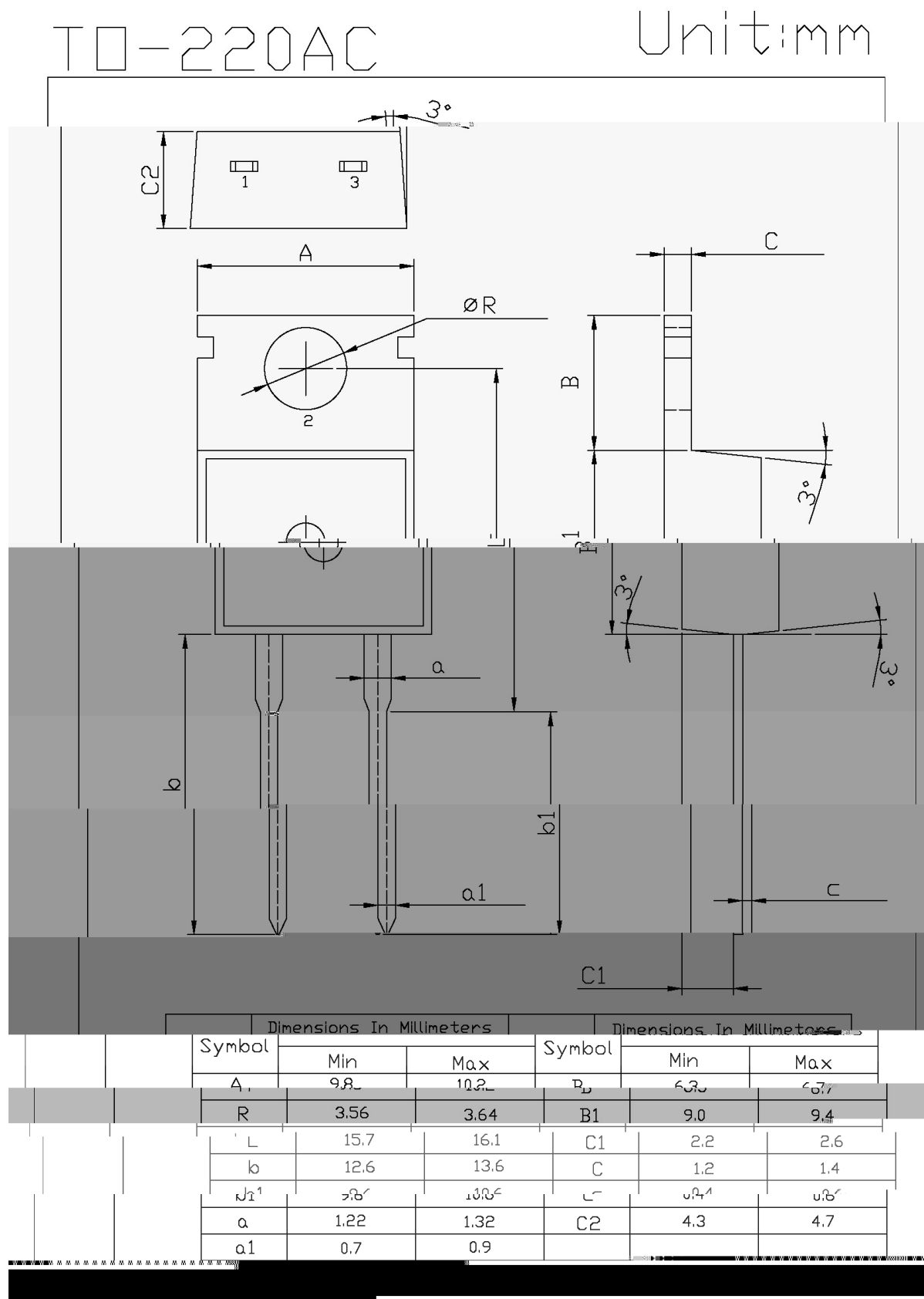
2 Unless otherwise noted, values for the parameters of a



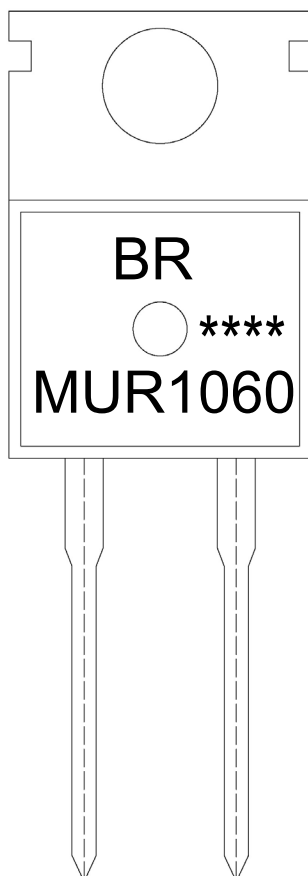
/ Electrical Characteristic Curve



I Package Dimensions



/ Marking Instructions



EU

P XU4393

Note:

BR:

Company Code

MUR1060

Product Type.

****:

Lot No. Code, code change with Lot No.

