

/ Descriptions

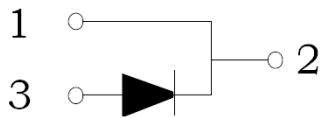
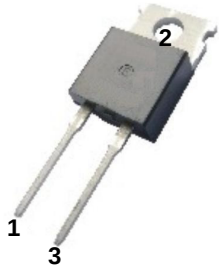
Ultrafast Recovery Diode in a TO-220AC Plastic Package.

/ 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}	200	V
RMS Voltage	V_{RMS}	140	V
DC Blocking Voltage	V_{DC}	200	V
Average Forward Current	I_F	1 15	A
Peak forward surge current	I_{FSM}	200	A
Typical Thermal Resistance Junction to Case	R_{JC}	1.5	°C/W
Junction Temperature Range	T_J	150	°C
Storage Temperature Range	T_{stg}	-55 150	°C

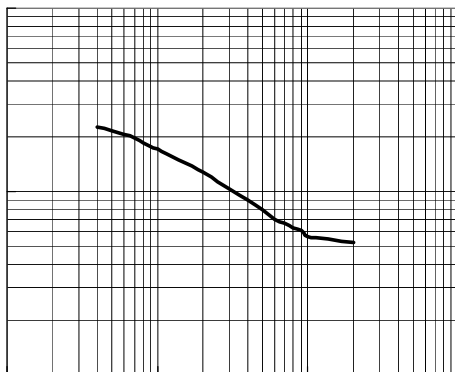
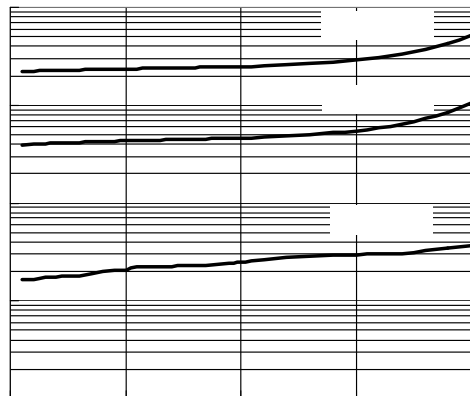
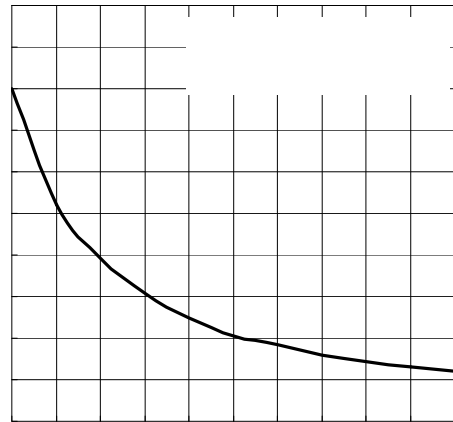
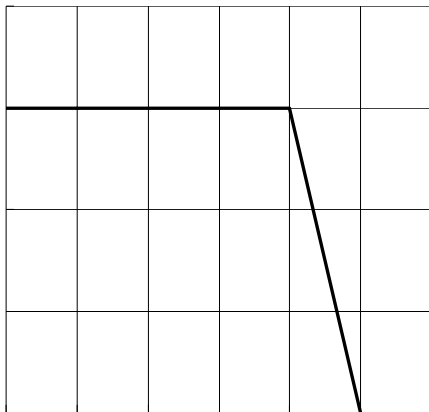
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_R	$I_R=1mA$	200			V
Forward Voltage	V_F	$I_F=3.0A$ $T_C=25$		0.76	0.85	V
		$I_F=3.0A$ $T_C=150$		0.55	0.65	
		$I_F=15A$ $T_C=25$			1.05	
		$I_F=15A$ $T_C=150$			0.85	
Instantaneous Reverse Current(Note1)	I_R	$V_R=200V$ $T_a=25$			10	A
		$V_R=140V$ $T_a=150$			100	
		$V_R=200V$ $T_a=150$			500	
Reverse Recovery Time	t_{rr}	$I_F=0.5A$ $I_R=1.0A$, $I_{RR}=0.25A$			35	ns

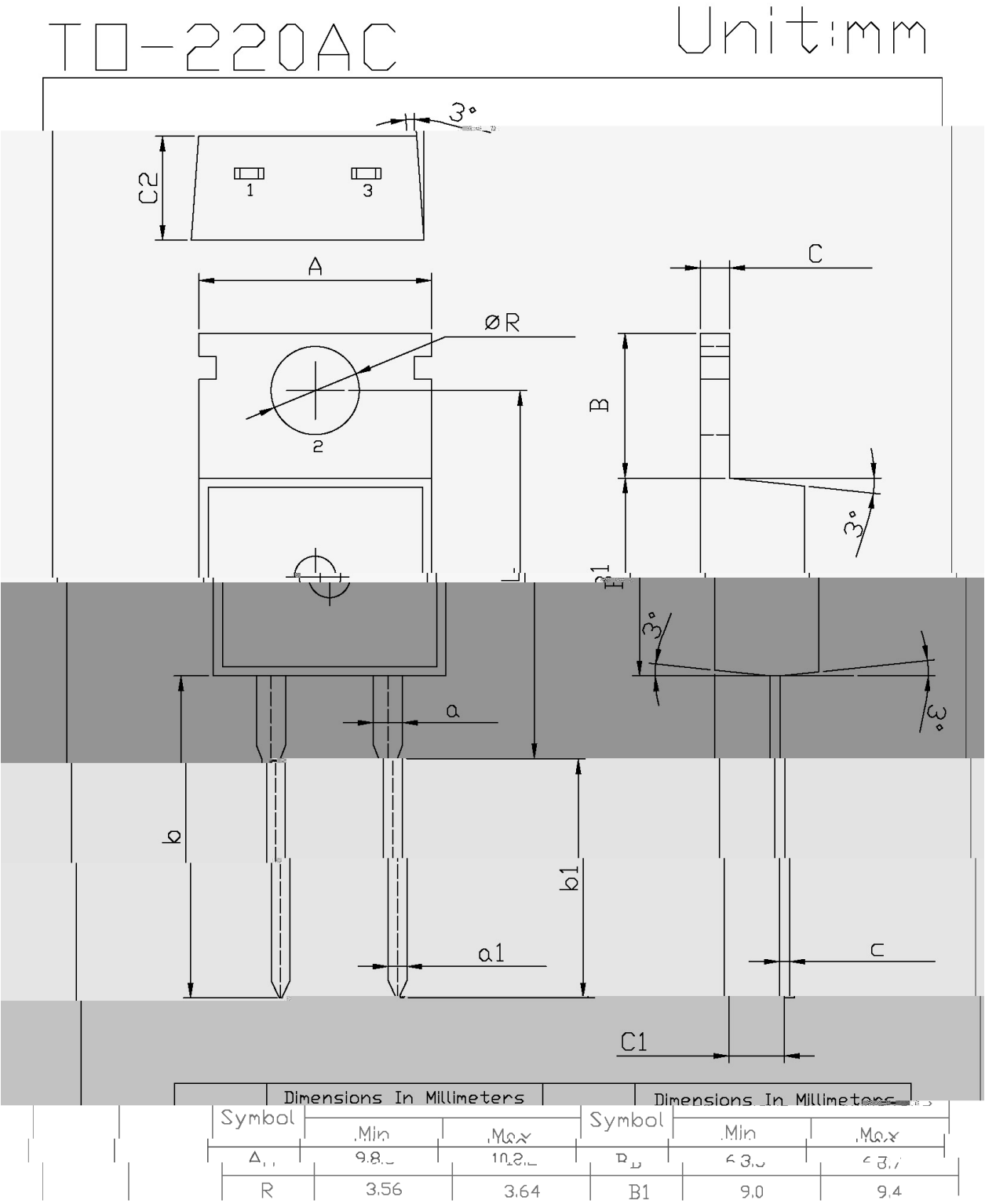
Notes

1. /Short duration pulse test used to minimize self-heating effect.
2. Unless otherwise noted, values for the parameters of a single chip

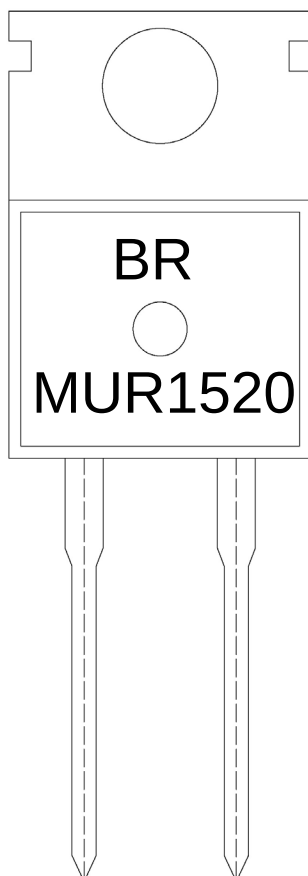
/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



Note:

BR:

Company Code

MUR1520

Product Type.

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Lot No. Code, code change with Lot No.

