

WR0553 M M ồ Ồ ư ư ॥ 1

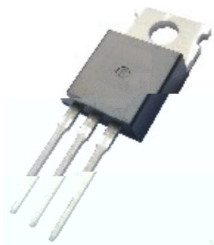
Ultrafast Recovery Diode in a TO-220 Plastic Package.

ṛ ṡ ā ṭ̃ | f ōj ð Õ ʉ || ʎ | ʈ ð ʱ ōj ɾ ʙ ɖ ɓ | ʃ

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

[illegible]

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



PIN1 Anode PIN 2 Cathode PIN 3 Anode

/ h_{FE} Classifications & Marking

M 7 " See Marking Instructions

/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	200	V
RMS Reverse Voltage	V_{RMS}	140	V
DC Blocking Voltage	V_{DC}	200	V
Average Forward Current	I_F	2×6	A
Non Repetitive Peak Surge Current	I_{FSM}	100	A
Thermal Resistance Junction to Case	$R_{\theta JC}$	2.8	/W
Operating and Storage Temperature Range	T_j T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

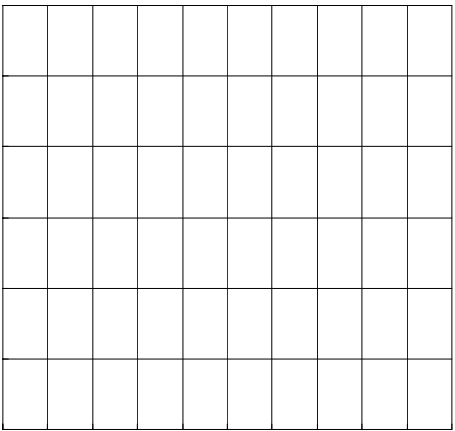
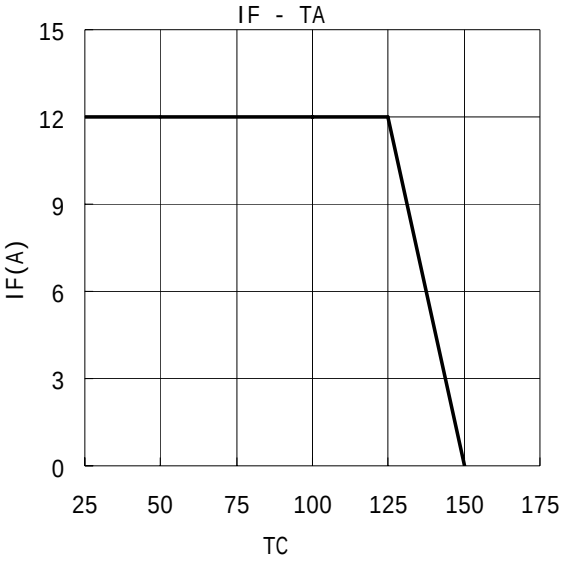
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=2A$ $T_c=25$		0.82		V
		$I_F=2A$ $T_c=125$		0.68		V
		$I_F=6A$ $T_c=25$		0.92	1.0	V
		$I_F=6A$ $T_c=125$		0.82	0.9	V
Instantaneous Reverse Current	I_R Note 1	$V_R=200V$ $T_a=25$			10	μA
		$V_R=200V$ $T_a=125$			150	μA
Reverse Recovery Time	t_{rr}	$I_F=0.5A$ $I_R=1.0A$ $I_{RR}=0.25A$			35	ns

/Notes

4. $\Delta T \sim 100^\circ C$ / Short duration pulse test used to minimize self-heating effect.

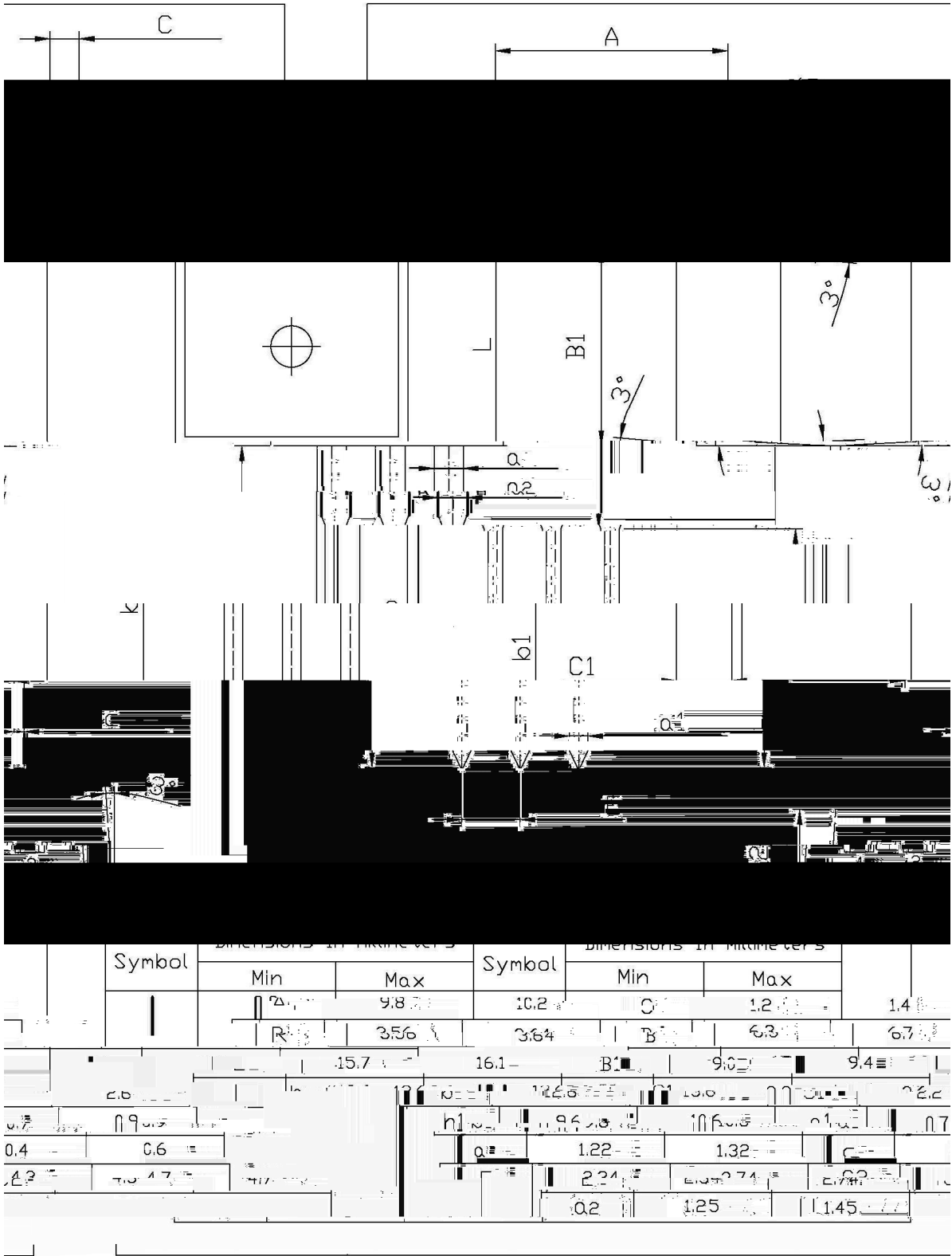
2. Unless otherwise noted, values for the parameters of a single chip

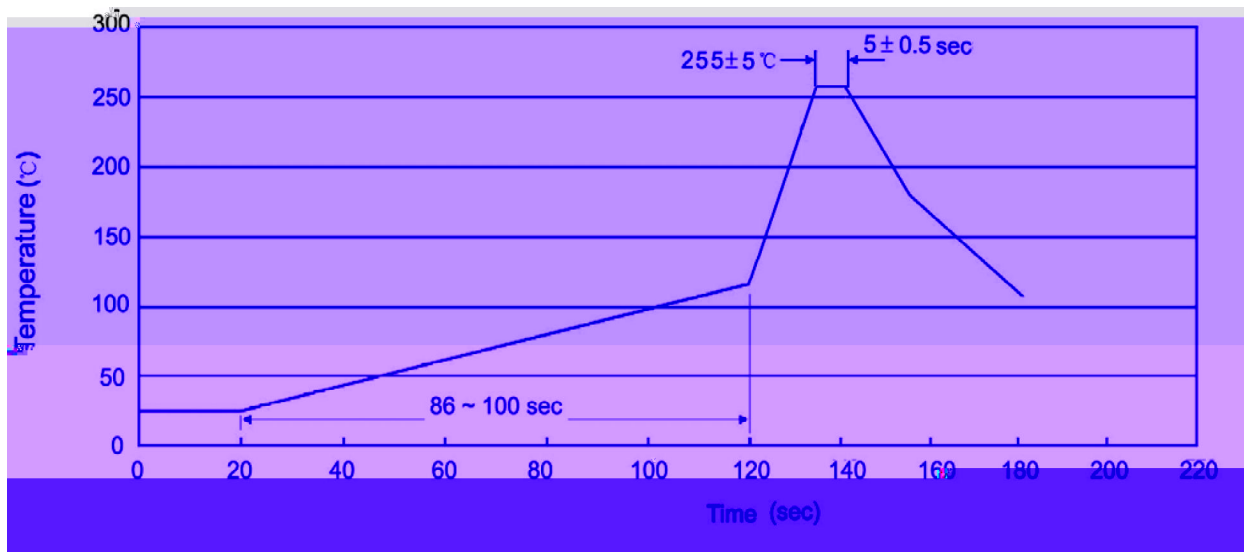
/ Electrical Characteristic Curve



/ Package Dimensions

单位: mm TO-220 E




() / Temperature Profile for Dip Soldering(Pb-Free)


” X

1. 25 ~ 150 °C, Time: 60 ~ 90 sec;
2. 255 ± 5 °C, Time: 5 ± 0.5 sec;
3. Cooling Speed: 2 ~ 10 °C / sec.

Note:

1. Preheating: 25 ~ 150 °C, Time: 60 ~ 90 sec.
2. Peak Temp.: 255 ± 5 °C, Duration: 5 ± 0.5 sec.
3. Cooling Speed: 2 ~ 10 °C / sec.

/ Resistance to Soldering Heat Test Conditions

□ 270 ± 5 °C, Time: 10 ± 1 sec. Temp.: 270 ± 5 Time: 10 ± 1 sec

/ Packaging SPEC.

” Q T Y / BULK

Package Type	Units					Dimension (unit mm ³)		
	Units/Bag	Bags/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Bag	Inner Box	Outer Box
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

” 1 Y / TUBE

Package Type	Units					Dimension (unit mm ³)		
	Units/Tube	Tubes/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Tube	Inner Box	Outer Box
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

/ Notices