

Rev.H Jul.-2018

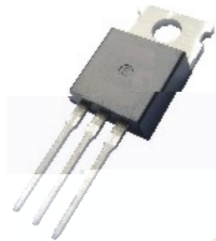
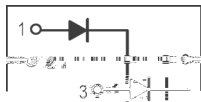
WO0553

Ultrafast Recovery Diode in a TO-220 Plastic Package.

τ H_f

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

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



PIN1 Anode

PIN 2 Cathode

PIN 3 Anode

See Marking Instructions

Parameter	N Symbol	Rating	H Unit
Peak Repetitive Reverse Voltage	V_{RRM}	400	V
RMS Voltage	V_{RMS}	280	V
DC Blocking Voltage	V_{DC}	400	V
Average Forward Current	I_F	2 8	A
Non Repetitive Peak Surge Current	I_{FSM}	120	A
Thermal Resistance Junction to Case	R_{JC}	2.8	/W
Operating and Storage Temperature Range	T_j T_{stg}	-55 150	

Parameter	N Symbol	Test Conditions	Min	ϵ Typ	Max	H Unit
Forward Voltage	V_F	$I_F=2A$ $T_c=25$		0.93	1.1	V
		$I_F=2A$ $T_c=150$		0.69	0.8	V
		$I_F=8A$ $T_c=25$		1.1	1.3	V
		$I_F=8A$ $T_c=150$		0.92	1.1	V
Instantaneous Reverse Current	I_R Note 1	$V_R=400V$ $T_a=25$			1.0	A
		$V_R=400V$ $T_a=150$			100	A
Reverse Recovery Time	t_{rr}	$I_F=0.5A$, $I_{RR}=0.25A$ $I_R=1.0A$,			50	ns

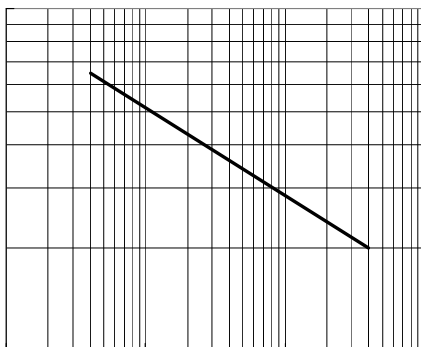
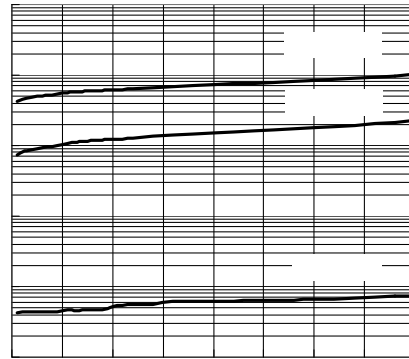
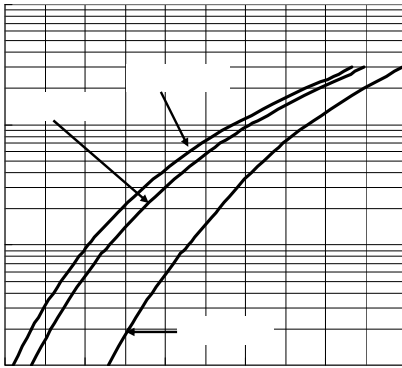
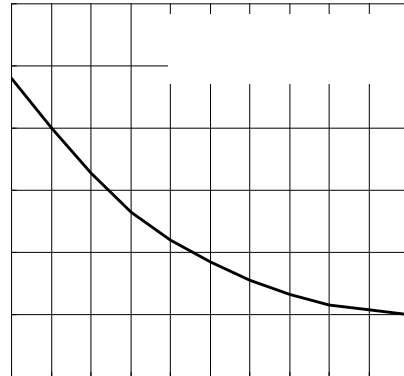
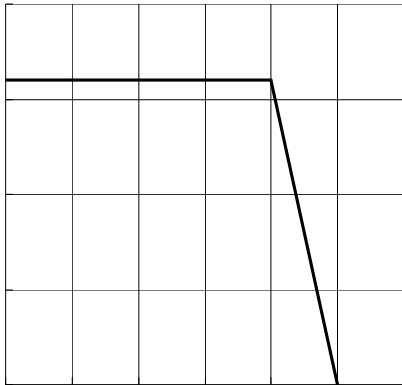
/Notes

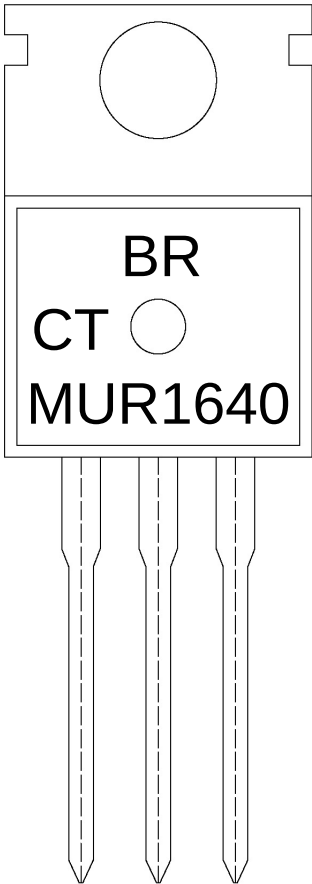
41
effect.

2.
single chip

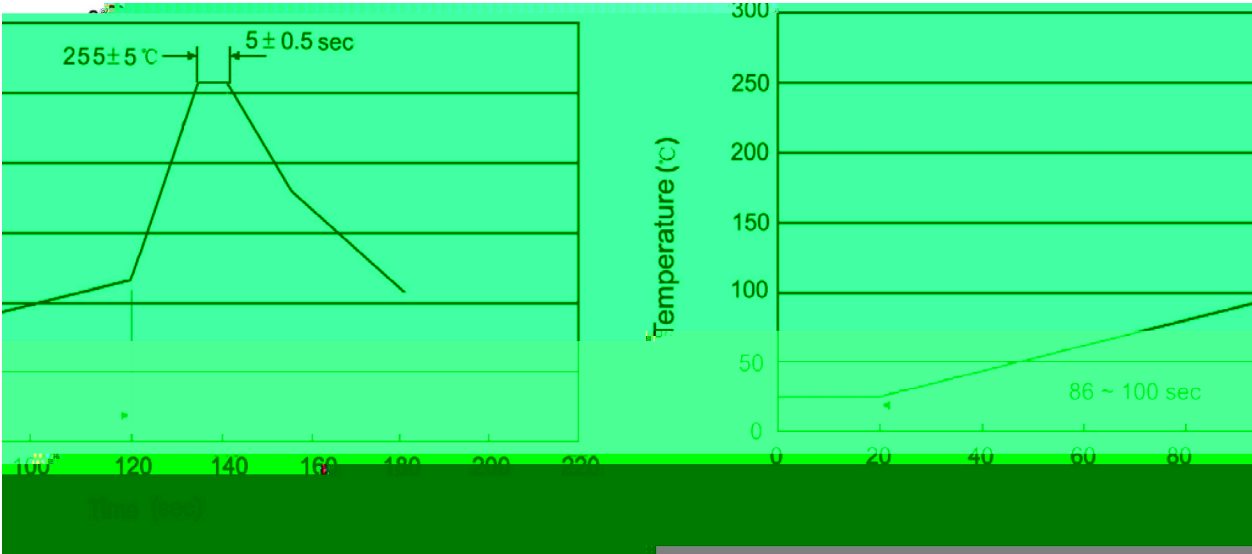
/Short duration pulse test used to minimize self-heating

/ Unless otherwise noted, values for the parameters of a





BR	N		
MXR4643	N		
CW:			
****	N	N	
Note:			
BR:	Company Code		
MXR4643	Product Type.		
CW:	Internal Structure		
****:	Lot No. Code, code change with Lot No.		



- 1

25 150

60 90sec;
- 2

255±5

5±0.5sec;
- 3

2 10

/sec.

Note:

1.Preheating:25~150

, Time:60~90sec.

2.Peak Temp.:255±5

, Duration:5±0.5sec.

3. Cooling Speed: 2~10

/sec.

270±5

10±1 sec.

Temp.:270±5

Time:10±1 sec

/ BULK

Package Type	Units					Dimension		(unit mm ³)

/ TUBE

Package Type	Units					Dimension		(unit mm ³)