

MURD820-01

Rev.B Apr.-2023

Fast Recovery Epi Diodes in a TO-252 Plastic Package.

High frequency operation, High surge forward current capability, HF Product.

For high frequency, high voltage, high curr

/ Absolute Maximum Ratings($T_a=25$)

Parameter	Symbol	Rating	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	V
Maximum RMS voltage	V_{RMS}	140	V
Maximum DC blocking Voltage	V_{DC}	200	V
Maximum Average Forward	$I_{F(AV)}$	8	A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	100	A
Thermal Resistance, Junction to Ambient	R_{JA}	50	/W
Operation Junction Temperature and Storage Temperature	T_j, T_{stg}	-55 150	

/ Electrical Characteristics($T_a=25$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=8A$ $T_C=25$			1.0	V
		$I_F=8A$ $T_C=125$			0.85	
Instantaneous Reverse Current	I_R	$V_R=200V$ $T_a=25$			10	A
		$V_R=200V$ $T_a=125$			100	
Reverse Recovery Time	t_{rr}	$I_F=0.5A$ $I_{RR}=0.25A$ $I_R=1.0A$			35	ns

/ Electrical Characteristic Curve

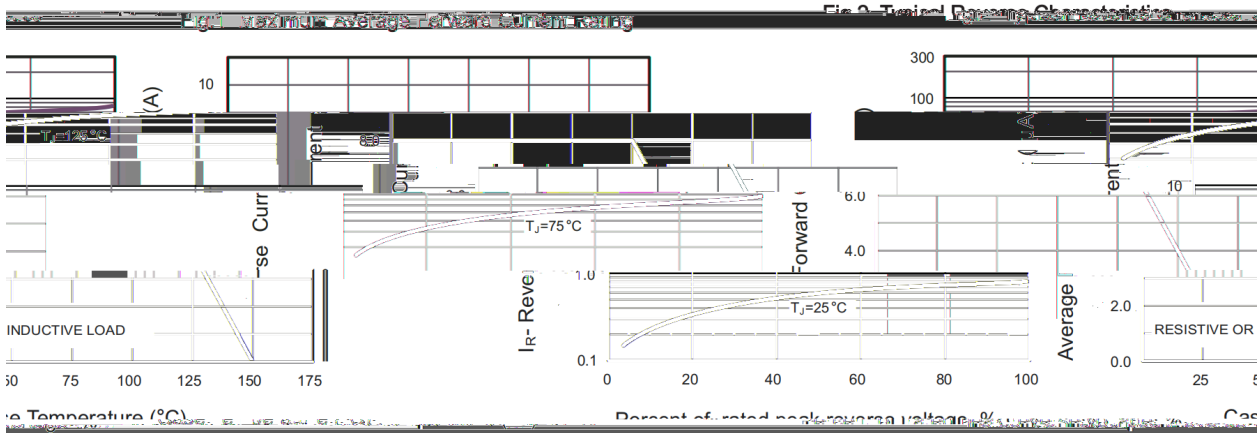
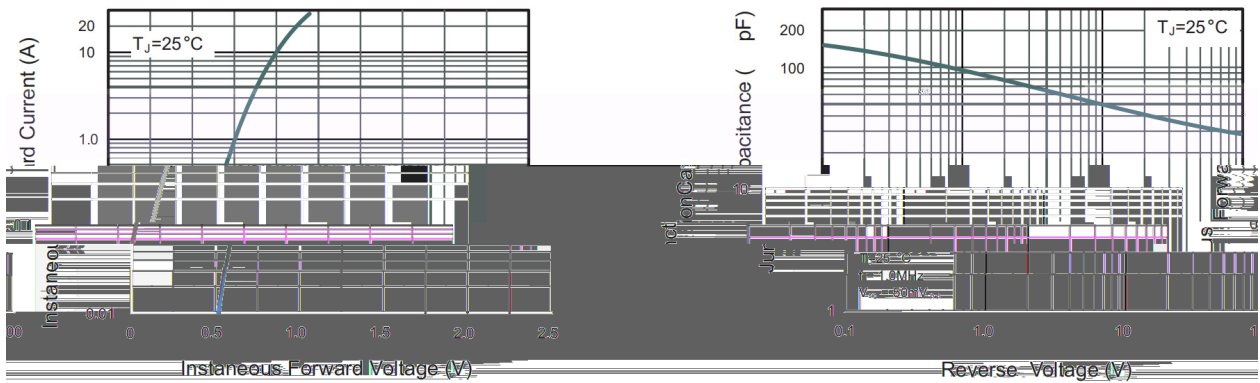


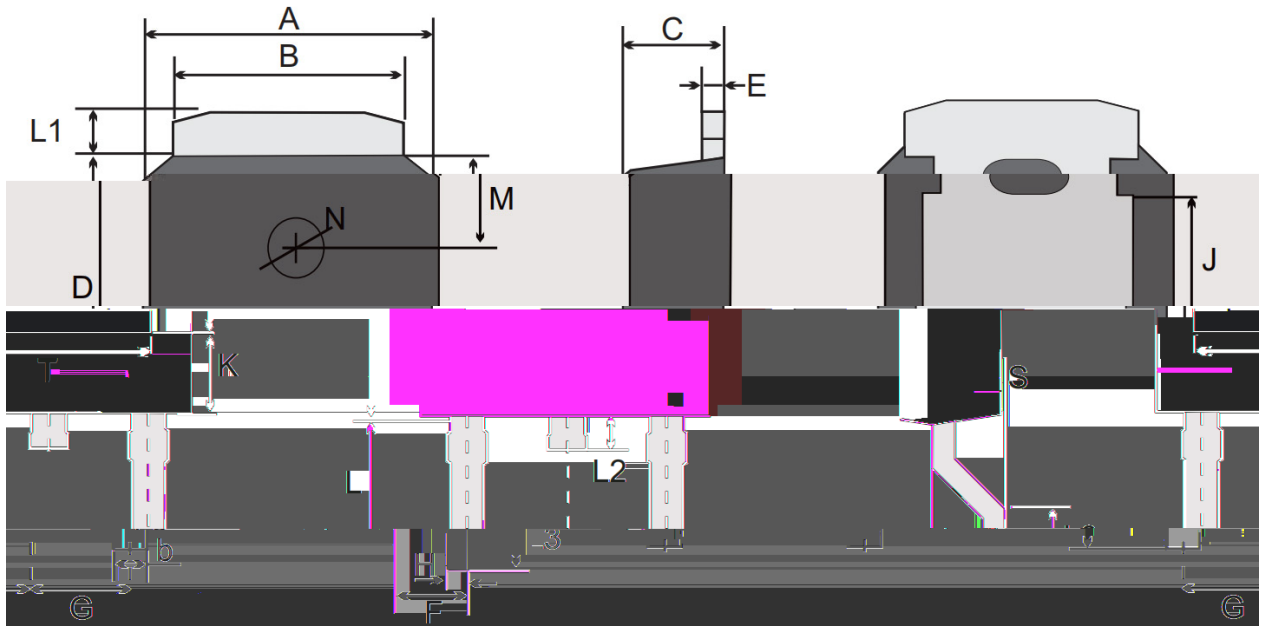
Fig.3 Typical Forward Characteristics

Fig.4 Typical Junction Capacitance



/ Package Dimensions

TO-252



TO-252(D-PAK) mechanical data

M	N	J	K	T	UNIT	A	B	b	C	D	E	F	G	H	L	L1	L2	L3	S	I	
						max	6.7	5.5	0.8	2.5	6.3	0.6	1.8		0.55	3.1	1.2	1.0	1.75	0.23	
1.0	1.0	0.8	1.0	1.0	mm																
0.3	0.3	0.16	0.3	0.3	mm						min	6.3	5.5	0.3	2.3	5.9	0.4	1.3		0.45	
1.22	1.22	0.39	0.39	0.39	mm						max	2.64	2.17	3.1	9.8	2.48	2.4	7.1		2.2	
110	30	31	51	71	mil						typ	260	209	28	90	210	70	59		90	
6	31	24	55	0	mil						min	248	201	12	83	232	16	51		18	10

/ Marking Instructions



Note:

BR:

Company Code

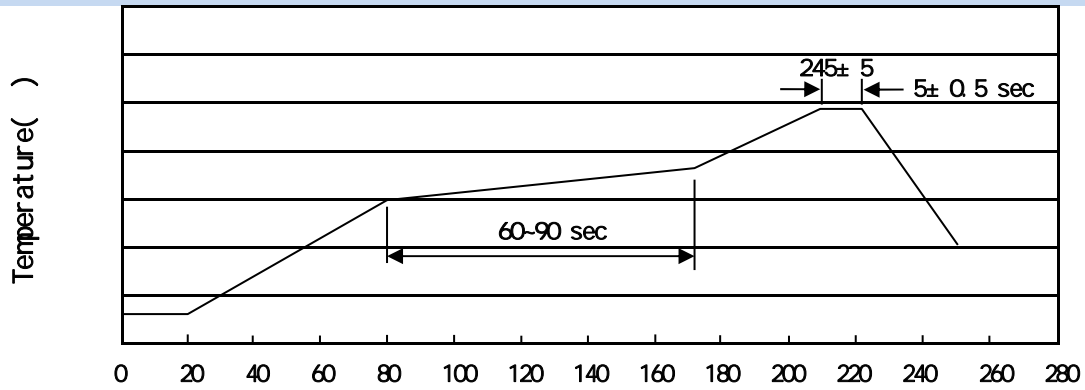
MURD820

Product Type

****:

Lot No. Code, code change with Lot No

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



Note:

- | | | | |
|---|---------|-----------|---|
| 1 | 150 180 | 60 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245 5 | 5 0.5sec; | 2.Peak Temp.:245 5 , Duration:5 0.5sec. |
| 3 | 2 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260 5 10 1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
TO-252	2,500	2	5,000	6	30,000	13 x16	360x360x50	380x335x366

/ 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-251/252	75	48	3,600	5	18,000	526x20.5x5.25	555x164x50	575x290x180

/ Notices