/ Descriptions

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

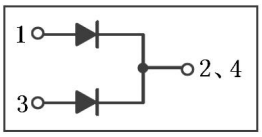
/ Features

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

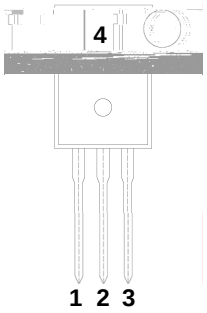
/ Applications

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

/ Equivalent Circuit



/ Pinning



PIN1 Anode PIN 2 Cathode PIN 3 Anode PIN 4 NC

/ h_{FE} Classifications & Marking

See Marking Instructions

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	2×8	A
Non Repetitive Peak Surge Current	I_{FSM}	125	A
Thermal Resistance Junction to Case	$R_{\theta Jc}$	3.0	/W
Storage Temperature Range	T_j T_{stg}	-55 150	

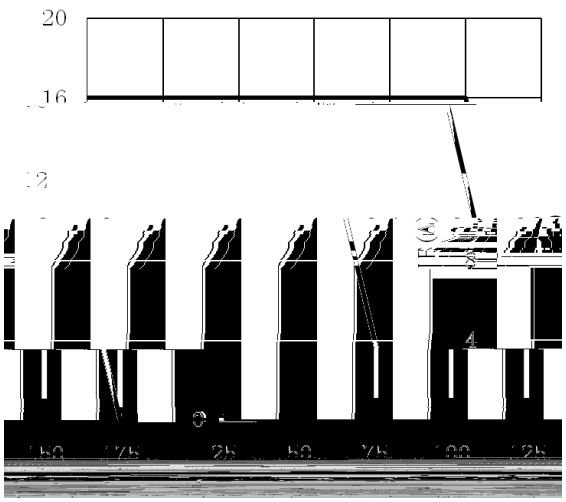
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	I_F =8A(T_C=25)			1.8	V
		I_F =8A(T_C=150)		1.05	1.3	V
		I_F =16A(T_C=125)			2.0	V
		I_F =16A(T_C=150)		1.28	1.6	V
Instantaneous Reverse Current	I_R	V_R=600V(T_a=25)			5	μA
		V_R=600V(T_a=150)		16	100	μA
Reverse Recovery Time	t_{rr}	I_F=0.5A I_R=1.0A I_{RR}=0.25A			50	ns

/Notes

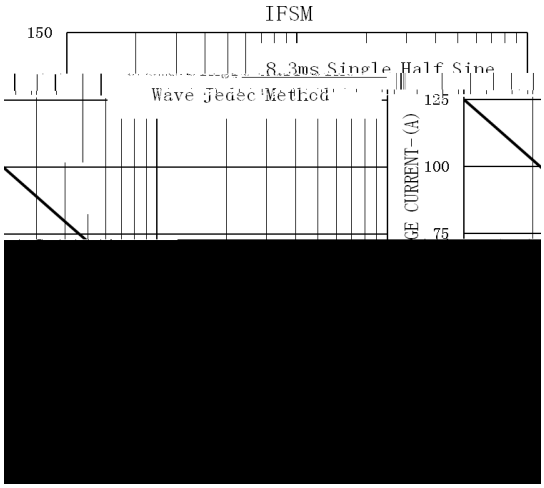
1.

/ Electrical Characteristic Curve

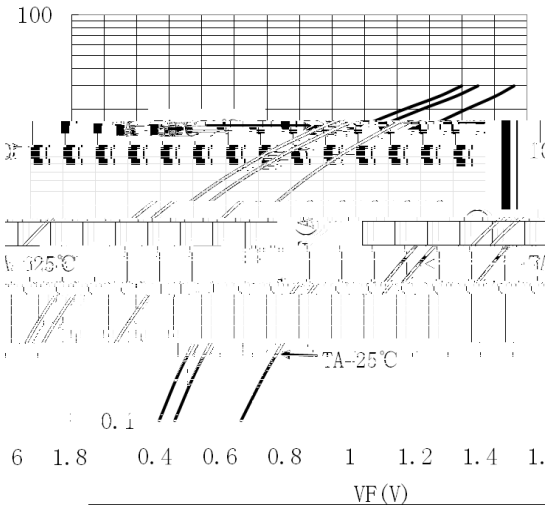
IF - TC



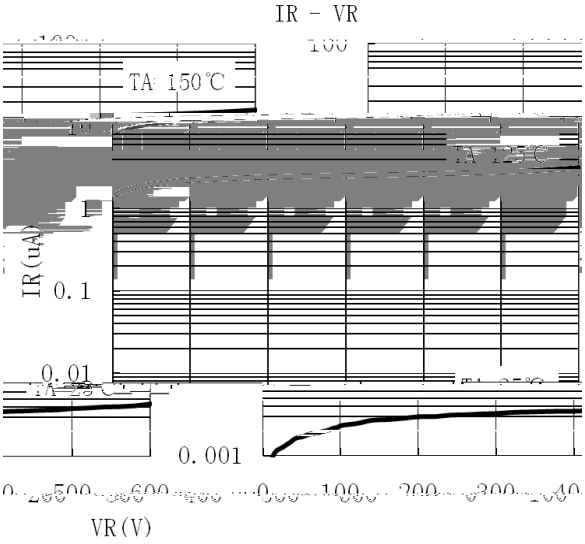
IFSM



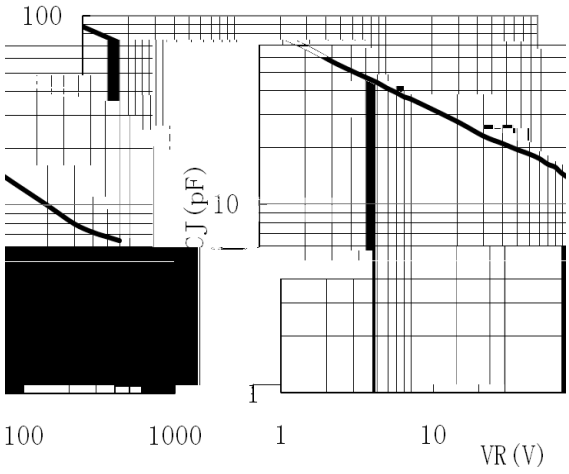
IF - VF



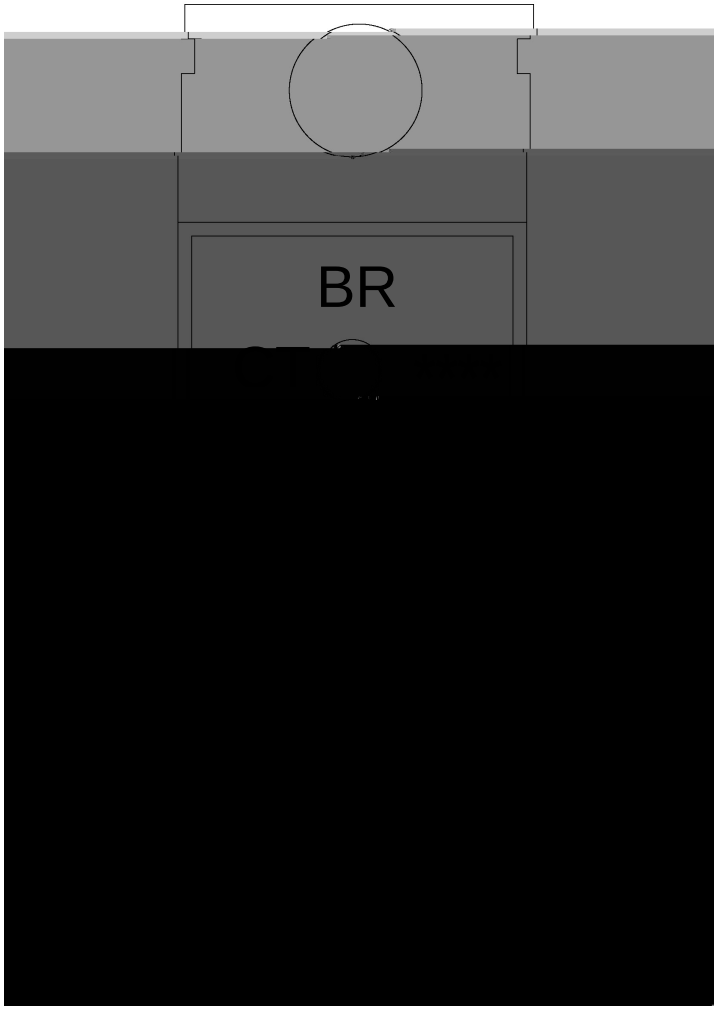
IR - VR



CJ - VR



/ Marking Instructions



BR

MURJ1660

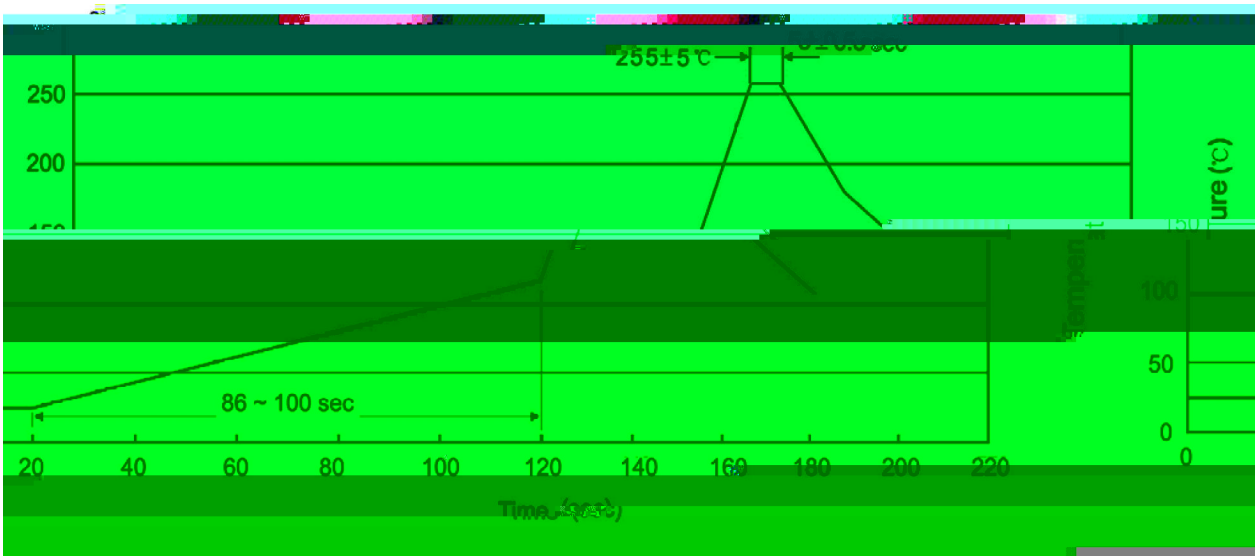
CT:

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Note:

BR:	Company Code
MURJ1660	Product Type.
CT:	Internal Structure
****:	Lot No. Code, code change with Lot No.

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



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

/ Resistance to Soldering Heat Test Conditions

270±5	10±1 sec.	Temp.:270±5	Time:10±1 sec

/ Packaging SPEC.

/ TUBE

Package Type	Units					Dimension (unit mm³)		
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-220S	50	20	1000	5	5000	532×31.4×5.5	555×164×50	575×290×180

/ Notices