

Descriptions

This is Ultrafast Recovery Diode in a TO-220FAC Plastic Package, Adopt new mold

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

Marking

See Marking Instructions

Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	600	V
RMS Reverse Voltage	V_{RMS}	420	V
DC Blocking Voltage	V_{DC}	600	V
Forward Current	I_F	1 × 10	A
Peak forward surge current	I_{FSM}	125	A
Typical Thermal Resistance Junction to Case	$R_{\theta Jc}$	4	°C/W
Junction Temperature Range	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

Electrical Characteristics(Ta=25°C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	VR	IR=1mA	600			V
Forward Voltage	VF	IF=10A TC=25°C			1.6	
		IF=10A TC=125°C			1.4	
Instantaneous Reverse Current	IR (Note 1)	VR=600V Ta=25°C			10	μA
		VR=600V Ta=125°C			500	
Reverse Recovery Time	trr	IF=0.5A IR=1.0A IRR=0.25A			28	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

Fig.1 TYPICAL FORWARD CURRENT DERATING CURVE

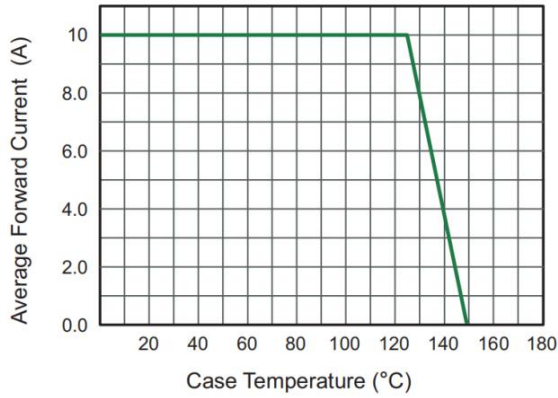


Fig.2 Typical Reverse Characteristics

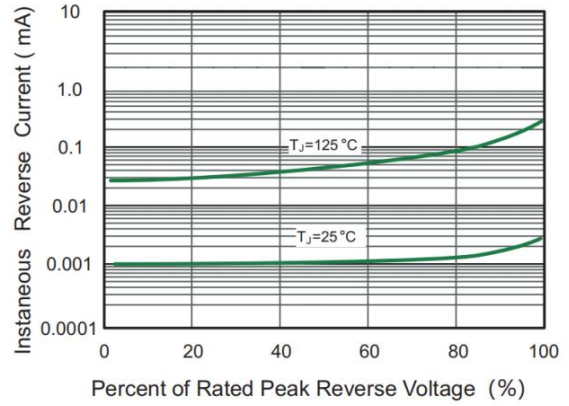


Fig.3 Typical Forward Characteristics

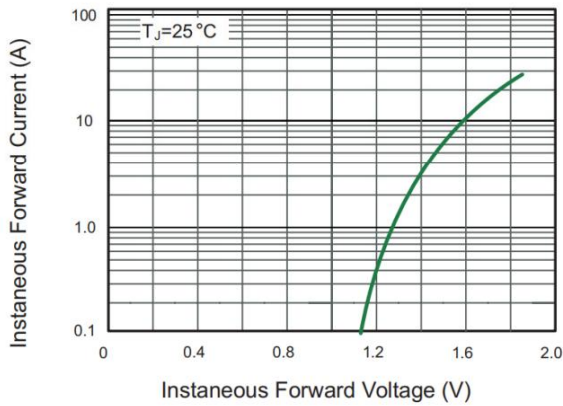
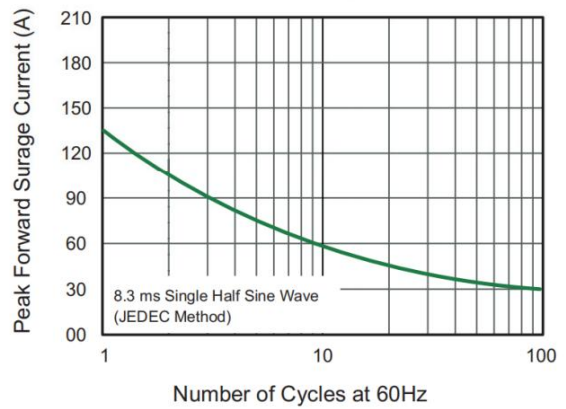
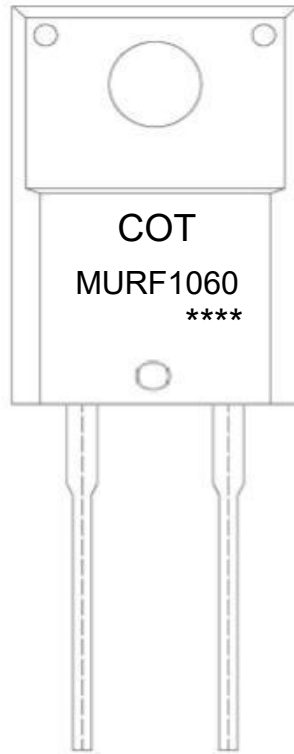


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



Marking Instructions



Note:

- COT: Company Code
- MURF1060: Product Type
- ****: Lot No. Code, code change with Lot No

Packaging SPEC

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/AC/FAC	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

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/AC/FAC	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

Package Dimensions

TO-220FAC

