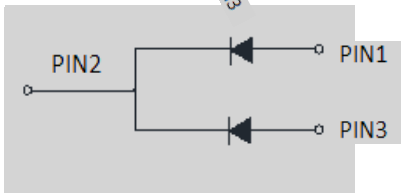
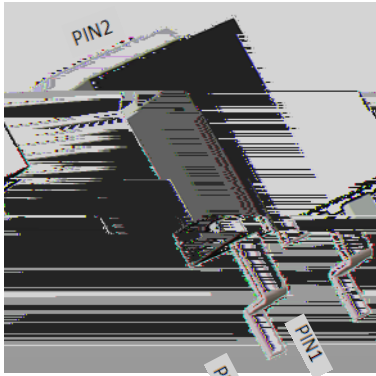


## Ultra-Fast Recovery Diodes 5A\*2 FRED



### Features

- Adopt FRED chip
- Low forward Voltage drop
- Fast reverse recovery time
- High frequency operation
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability

### Typical Applications

Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

### Mechanical Data

**Package:** TO-263

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant

**Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

**Polarity:** As marked

### Maximum Ratings (T<sub>j</sub>=25 Unless otherwise specified)

PARA			MURB1060CT-F2-W5094HF
Device marking code			MURB1060CT
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	V	600
Average Rectified Output Current @60Hz sine wave, R-load, T <sub>c</sub> (FIG.1)	I <sub>O</sub>	A	10
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, T <sub>j</sub> =25	I <sub>FSM</sub>	A	50
Current Squared Time @1ms t 8.3ms T <sub>j</sub> =25	I <sup>2</sup> t	A <sup>2</sup> s	10
Storage Temperature	T <sub>stg</sub>		-55 ~ +175
Junction Temperature	T <sub>j</sub>		-55 ~ +175
Typical Junction capacitance @4V,1MHz	C <sub>j</sub>	pF	20



# MURB1060CT-F2-W5094HF

## Electrical Characteristics

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Instantaneous forward voltage drop per diode	$V_{FM}$	V	$I_{FM}=5.0A @ T_j=25$	-	1.45	1.6
			$I_{FM}=5.0A @ T_j=150$		1.15	1.3
DC reverse current at rated DC blocking voltage per diode	$I_{RRM1}$	uA	$V_{RM}=V_{RRM}$ $T_j=25$	-	-	5.0
	$I_{RRM2}$		$V_{RM}=V_{RRM}$ $T_j=150$	-	35	200
Reverse Recovery Time	$T_{rr}$	ns	$I_F=0.5A$ $I_{RM}=1A$ $I_{RR}=0.25A$ $T_j=25$	-	25	35
			$T_j=25$	-	50.8	-
			$T_j=125$	-	81.8	-
Peak recovery current	$I_{RRM}$	A	$T_j=25$	-	3.06	-
			$T_j=125$			
Reverse recovery charge	$Q_{rr}$	nC	$T_j=25$	-	78.88	-
			$T_j=125$	-	280	-

## Thermal Characteristics $T_j=25$ Unless otherwise specified

PARAMETER		SYMBOL	UNIT	MURB1060CT-F2-W5094HF
Thermal Resistance	Between junction and case	R J-C	/W	2.0
Thermal Resistance	Between junction and Air	R J-A	/W	50

## Ordering Information (Example)

PREFERRED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MURB1060CT	Approximate 1.43	800	/	8000	13° Reel

**MURB1060CT-F2-W5094HF**



Outline Dimensions

