

Product Features

- Glass Passivated Protection Construction
- Ultrafast Recovery Time
- Soft Recovery Characteristics
- Low Forward Voltage and Low Leakage Current
- High Current capability and High reliability

Applications

- Freewheeling, Rectification, Clamp
- Snubber Diode
- Switch Power Supplies
- Motor Control
- Inverters, Frequency Converters
- Power Factor Correction

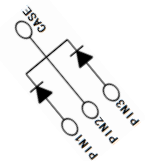
产品特点

- 玻璃钝化保护结构
- 超快恢复时间
- 软恢复特性
- 低正向压降，低漏电流
- 高的电流能力，高的可靠性

应用

- 续流、整流、钳位
- 缓冲二极管
- 开关电源
- 电动机控制
- 逆变器、变频器
- 功率因数校正（PFC）

Part Number 型号	Package 封装
MUR8040PT	TO-247-3L



Absolute Maximum Ratings (额定参数, Ta=25°C)

Parameter 参数	Symbol 符号	Value 额定值	Units 单位
Repetitive Peak Reverse Voltage 可重复反向峰值电压	V_{RRM}	400	V
Surge Peak Reverse Voltage 浪涌反向峰值电压	V_{RSM}	400	V
Continuous Forward Current * 连续正向电流 *	I_F	40 X 2	A
Non-Repetitive Peak Surge Forward Current@8.3mS half sine wave 正向浪涌峰值电流	I_{FSM}	450	A
Maximum Operating Junction Temperature 最高工作结温	T_j	175	°C
Storage Temperature Range 存储温度范围	T_{STG}	-55~175	°C



Electrical Characteristics (电性能)

Parameter 参数	Symbol 符号	Test Conditions 测试条件	Min 最小	Type 典型	Max 最大	Units 单位
Reverse Breakdown Voltage 反向击穿电压	V_{BR}	$I_R=100\ \mu A$	400			V
Forward Voltage 正向压降	V_F	$I_F=40A, T_j=25^{\circ}C$		1.25	1.5	V
		$I_F=40A, T_j=125^{\circ}C$		1.05	1.3	V
Reverse Leakage Current 反向漏电流	I_R	$V_R=400V, T_j=25^{\circ}C$			2	μA
		$V_R=400V, T_j=125^{\circ}C$			250	μA
Reverse Recovery Time 反向恢复时间	T_{rr}	$I_F=0.5A, I_R=1A, I_{rr}=0.25A$		35	50	ns
		$V_R=30V, I_F=1A, di/dt=200A/\mu s$		28		ns

Remake (备注): $T=25^{\circ}C$ (温度 $25^{\circ}C$)

Thermal Characteristics (热性能)

Package 封装	Parameter 参数	Symbol 符号	Max 最大值	Units 单位
TO-247-3	Thermal Resistance from Junction to Case 热阻 (结-壳)	R_{thJC}	0.85	$^{\circ}C/W$
	Thermal Resistance from Junction to Ambient 热阻 (结-环境)	R_{thJA}	68	$^{\circ}C/W$

Typical Performance (典型特性曲线)

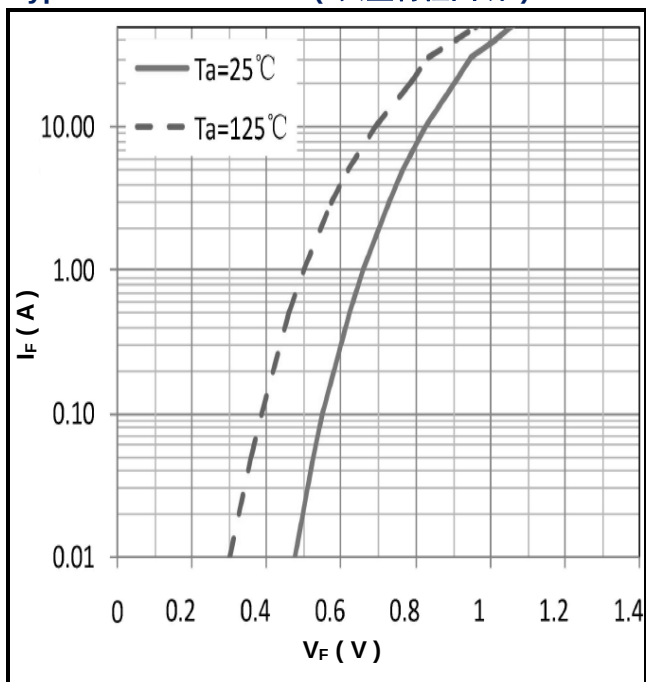


Figure 1. Forward Characteristics

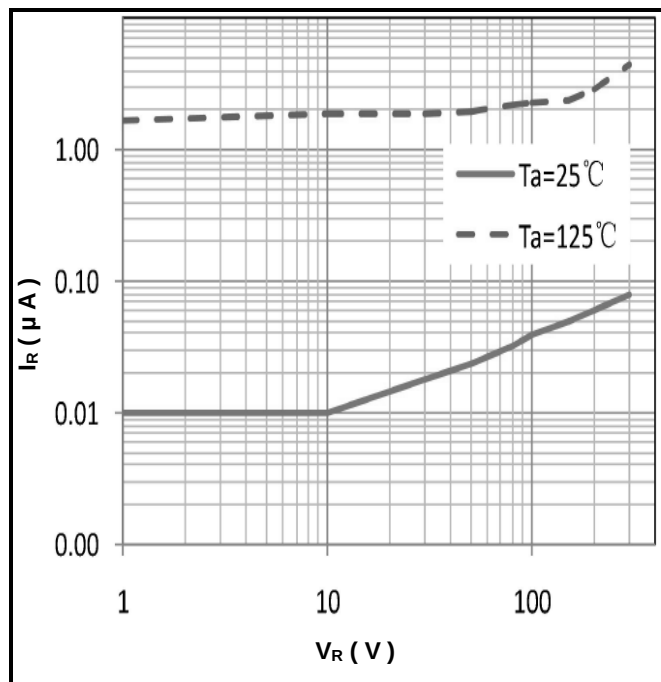


Figure 2. Reverse Characteristics

Package TO-247-3L (TO-247-3L 封装)

Symbol	Min.(mm)	Typ.(mm)	Max.(mm)
A	4.80	5.00	5.20
A1	2.80	3.00	3.20
A2	2.20	2.40	2.60
b	1.05	1.20	1.35
b1	2.70	3.00	3.30
b2	1.80	2.00	2.20
c	0.50	0.60	0.70
e	4.95	5.45	5.95
E	1.56	15.8	16.0
E1	12.3	12.5	12.7
E2	6.00	6.20	6.40
H	20.5	21.0	21.5
H1	19.0	20.0	21.0
H2	3.00	4.00	5.00
G	5.70	5.90	6.10
φP	3.30	3.50	3.50
φQ	2.30	2.50	2.70

