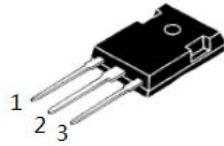


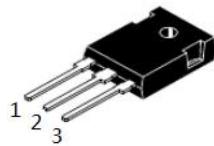


MUR3020PT/PTS

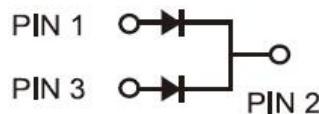
ULTRAFAST RECOVERY RECTIFIERS



TO-247/PT



TO-247S/PTS



Primary Characteristic

I_o	2*15A
V_{RRM}	200V
I_{FSM}	150A
V_F	0.88V
T_{Jmax}	175°C

FEATURES

- High speed switching capability
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- High reliability
- For use in low voltage, high frequency inverters



APPLICATIONS

Fast recovery diode, mainly used for rectification, used in high-power equipment, The express and ultrafast recovery diodes are suitable for high frequency and ultra high frequency circuits, respectively

MECHANICAL DATA

- **Case:** Molded plastic
- **Polarity:** As marked
- **Mounting Position:** Any
- **Molded Plastic:** UL Flammability Classification Rating 94V-0
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Solder bath temperature 275°C maximum, 10s per JESD 22-B106

Maximum Ratings (Per Leg) at $T_a=25^\circ C$ unless otherwise specified

Characteristics	Symbol	Value		Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200		V
Working Peak Reverse Voltage	V_{RWM}	200		V
Maximum DC Blocking Voltage	V_{DC}	200		V
Maximum Average Forward Rectified Current	I_o	15	A	
Per Leg		30		
Total				
Peak Forward Surge Current,8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	150		A
Operating Temperature Range	T_J	175		°C
Storage Temperature Range	T_{STG}	-55 to +150		°C
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	2		°C/W

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

Electrical Characteristics (Per Leg) unless otherwise specified

Characteristics	Symbol	Value		Unit
Forward Voltage Drop(Note2)	V_F	Typ.	Max.	V
at $I_F=3A$		0.79	-	
		0.65	-	
at $I_F=5A$		0.84	-	
		0.71	-	
at $I_F=15A$		0.98	1.05	
		0.88	-	
Maximum Reverse Current at $V_R=200V$	I_R	0.1	10	μA
TA=125°C		2	-	μA
Maximum Reverse Recovery Time at $I_F=0.5A$, $I_R=1A$,	Tr	-	25	ns

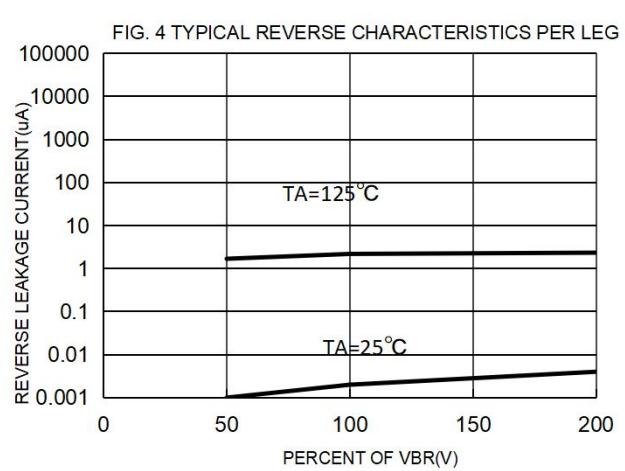
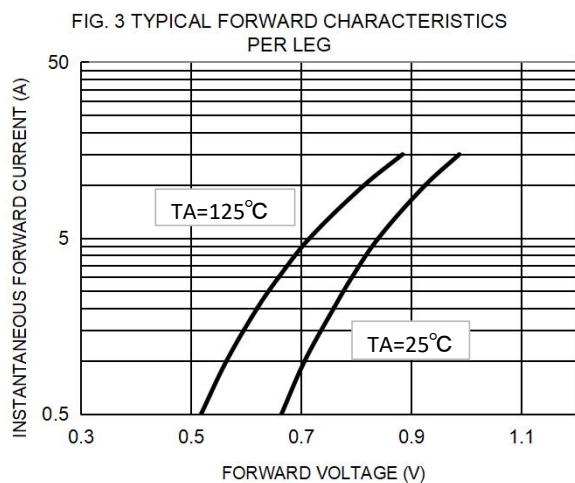
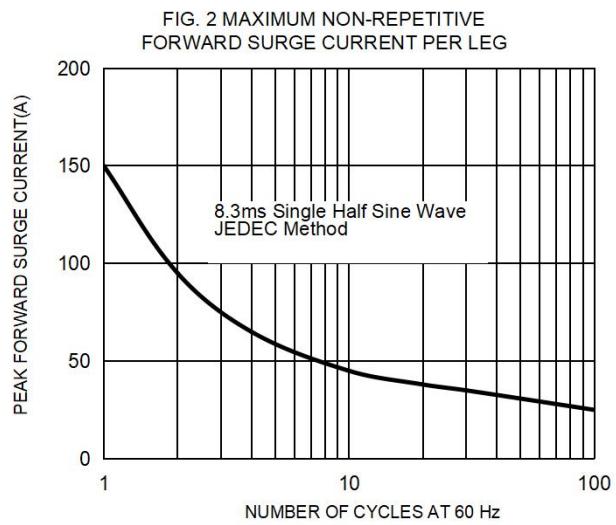
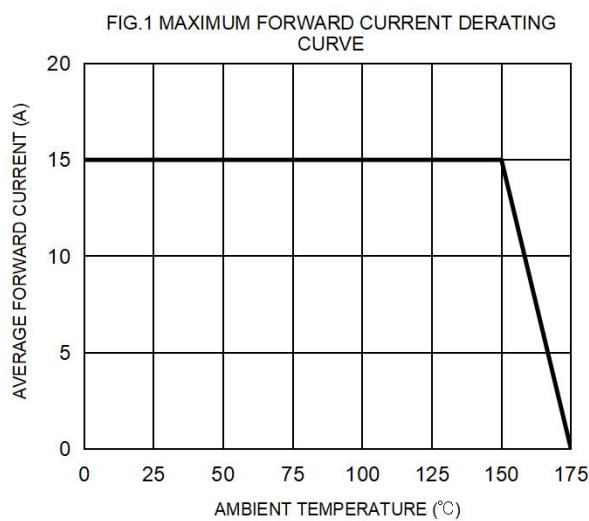
Note2:Pulse test: 300 μs pulse width, 1 % duty cycle



MUR3020PT/PTS

ULTRAFAST RECOVERY RECTIFIERS

RATINGS AND CHARACTERISTIC CURVES



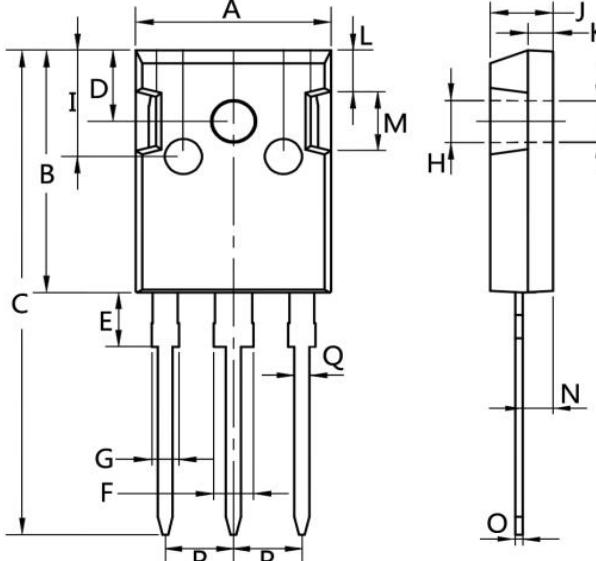


MUR3020PT/PTS

ULTRAFAST RECOVERY RECTIFIERS

Package Outline Dimensions millimeters

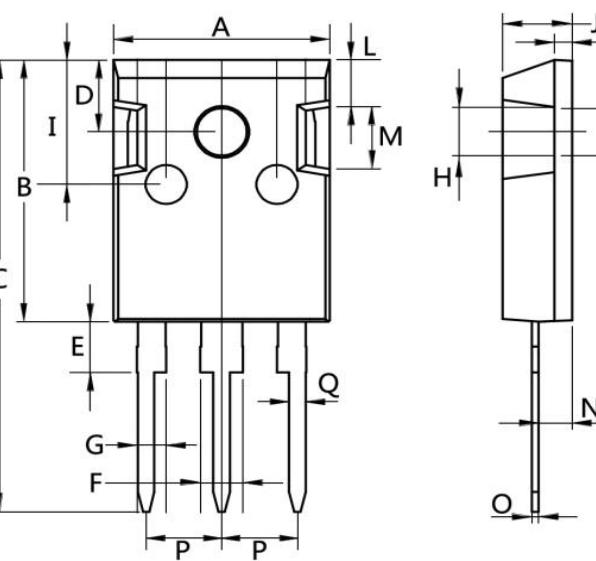
TO-247



Dim.	Min.	Max.
A	15.0	16.0
B	20.0	21.0
C	40.0	42.0
D	5.5	6.5
E	4.0	5.5
F	2.5	3.5
G	1.75	2.5
H	3.0	4.0
I	8.0	10.0
J	4.9	5.1
K	1.9	2.1
L	3.0	4.0
M	4.75	5.25
N	2.0	3.0
O	0.55	0.65
P	Typ 5.4	
Q	1.17	1.3

All Dimensions in millimeter

TO-247S



Dim.	Min.	Max.
A	15.0	16.0
B	19.5	20.5
C	33.5	35.5
D	5.0	6.0
E	3.5	4.5
F	2.5	3.5
G	1.75	2.5
H	3.0	4.0
I	9.0	11.0
J	4.9	5.1
K	1.15	1.35
L	3.0	4.0
M	4.75	5.25
N	2.0	2.5
O	0.45	0.55
P	Typ 5.4	
Q	1.17	1.3

All Dimensions in millimeter