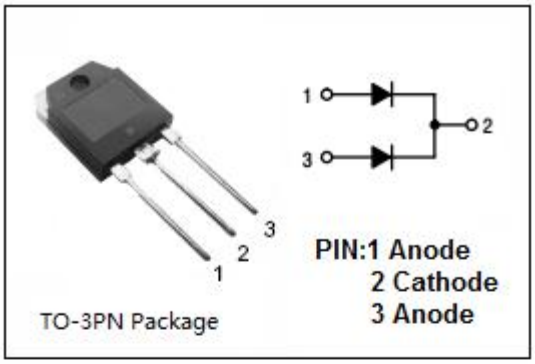
Ultrafast Rectifier

MUR40120PT

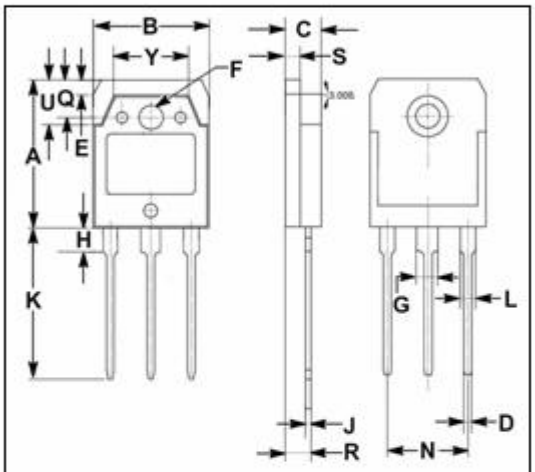


FEATURES

- Guarding for over voltage protection
- Dual rectifier construction,positive center tap
- Metal of silicon rectifier,majority carrier conduction
- Low forward voltage,high efficiency
- 100% tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Switching power supply
- Rectifier in switch mode supplies



DIM	mm MIN	mm MAX
A	19.60	20.30
B	15.50	15.70
C	4.70	4.90
D	0.90	1.10
E	1.90	2.10
F	3.40	3.60
G	2.90	3.20
H	3.20	3.40
J	0.595	0.605
K	19.80	20.70
L	1.90	2.20
N	10.89	10.91
Q	4.90	5.10
R	3.35	3.45
S	1.995	2.100
U	5.90	6.20
Y	9.90	10.10

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	1200	V
$I_{F(AV)}$	Average Rectified Forward Current	40	A
I_{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	180	A
T_J	Junction Temperature	-40~150	℃
T_{stg}	Storage Temperature Range	-40~150	℃

Fast Recovery Rectifier — MUR40120PT

ELECTRICAL CHARACTERISTICS(T_a=25℃) (Pulse Test: Pulse Width=300 μs,Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	I_F= 20A ;Tj=25℃	2.2	V
I_R	Maximum Instantaneous Reverse Current	V_R= $V_{RWM;}$Tj=25℃	1.0	μA
t_{rr}	Maximum Reverse Recovery Time	IF =0.5A;	50	ns