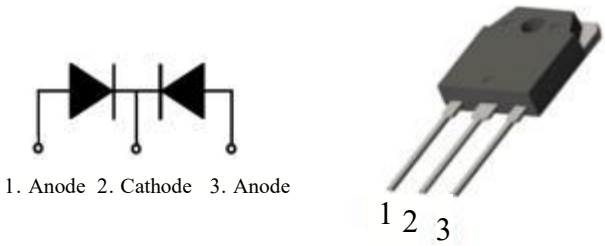
QMRT60U30B
Fast recovery diode

FEATURES

- Guard ring for transient protection
- Low power loss, High efficiency
- High current capability, Low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications



TO-3P-3L

Ordering Information		
Type NO.	**Marking**	**Package Code**
QMRT60U30B	QM60U30B	TO-3P-3L

Absolute Maximum Ratings T_C = 25ºC, unless otherwise noted			
Parameter	**Symbol**	**Value**	**Unit**
Peak Repetitive Reverse Voltage	V_{RRM}	300	V
DC Blocking Voltage	V_R	300	V
Average Forward Rectified Current @T_c=135 ºC	$I_{F(AV)}$	30*2	A
Non-repetitive Peak Surge Current 60Hz Single Half-Sine Wave	I_{FSM}	300	A
Operating Junction and Storage Temperature Range	T_J, T_{stg}	175, -55~+175	ºC

Thermal Resistance			
Parameter	**Symbol**	**Value(Max)**	**Unit**
Thermal Resistance, Junction-to-Case	R_{thJC}	0.53	ºC/W

Specifications (per diode) T_J = 25ºC, unless otherwise noted						
Symbol	**Parameter**		**Min.**	**Typ.**	**Max.**	**Unit**
V_F	I_F=30A	T_c=25 ºC	-	0.95	1.2	V
	I_F=30A	T_c=125 ºC	-	0.80	1.05	V
I_{RM}	V_R=300V	T_c=25 ºC	-	-	4	uA
	V_R=300V	T_c=125 ºC	-	40	-	uA
t_{rr}	I_F=1A, di/dt=200A/us, V_R=30V	T_c=25 ºC	-	28	-	ns

Typical Characteristics T_J = 25ºC, unless otherwise noted

Figure 1. Typical Forward Voltage Drop

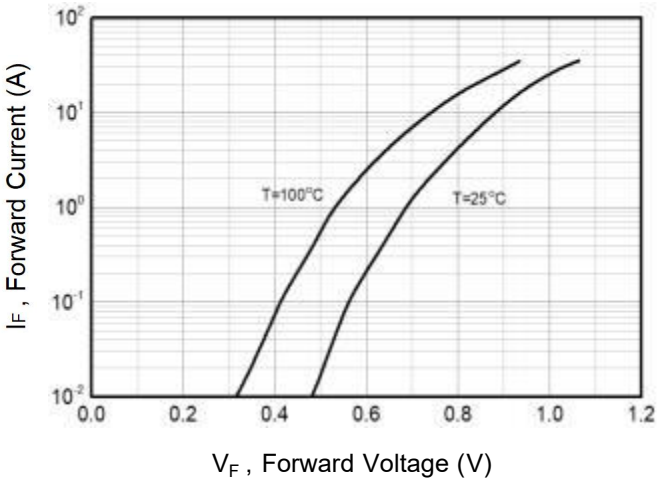


Figure 2. Typical Reverse Current

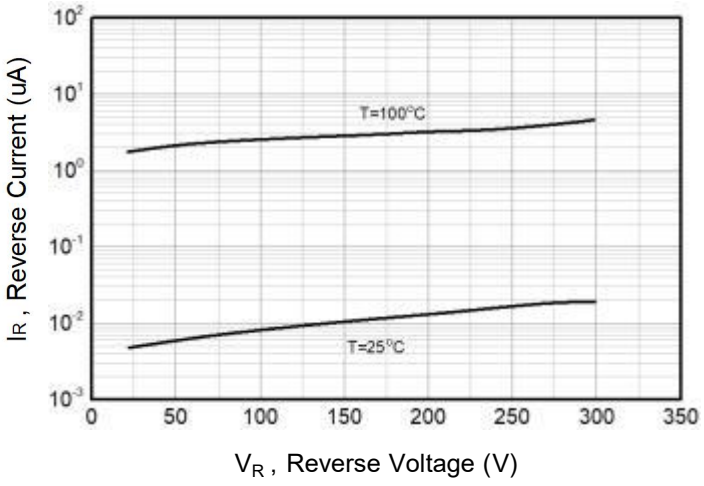


Figure 3. Typical Junction Capacitance

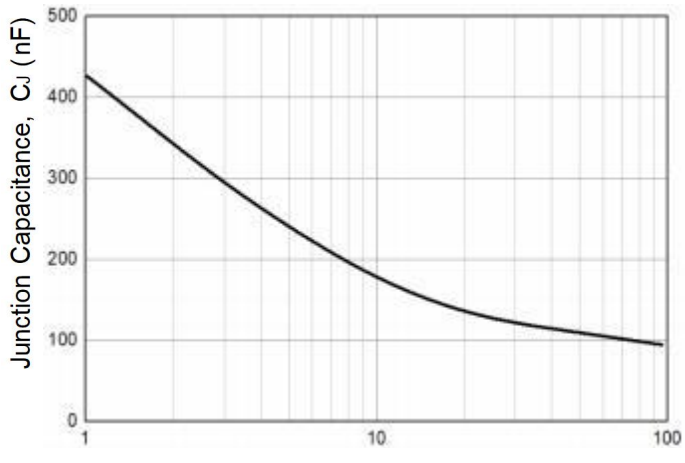
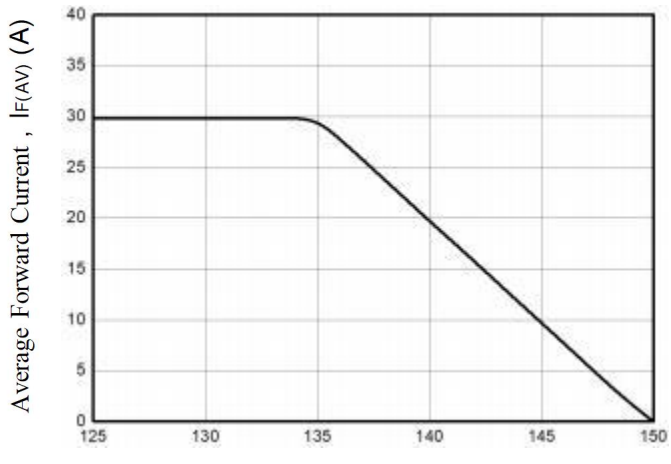


Figure 4. Power Derating



Outline Dimension

Unit: mm