



MUR870-ST

Fast Recovery Diode

Features

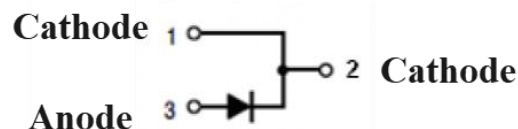
- High-speed switch
- Low power consumption
- High reliability

Applications

- PFC, UPS
- Ultrasonic cleaner
- Electric welder



TO-263



Absolute Maximum Ratings ($T_{AMB}=25^{\circ}\text{C}$, unless otherwise noted.)

Parameter	Symbol	Limit	Unit
Peak repetitive reverse voltage	V_{RRM}	700	V
Working peak reverse voltage	V_{RWM}	700	V
DC blocking voltage	V_R	700	V
Forward current	$I_{F(AV)}$	8	A
Peak repetitive forward current (Rated V_R , square wave, 20 kHz), $T_C=150^{\circ}\text{C}$	I_{FM}	16	A
Non repetitive peak surge current Surge applied at rated load conditions halfwave, single phase, 60 Hz)	I_{FSM}	100	A
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-40~150	$^{\circ}\text{C}$

Thermal Characteristics

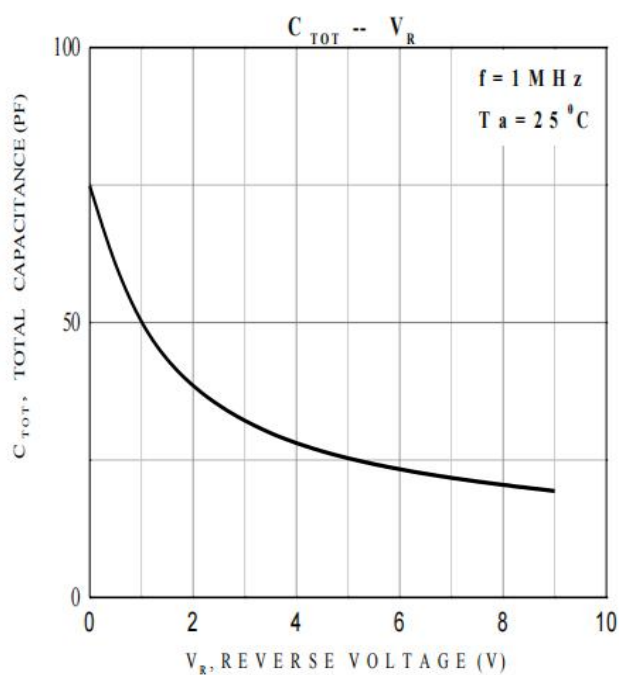
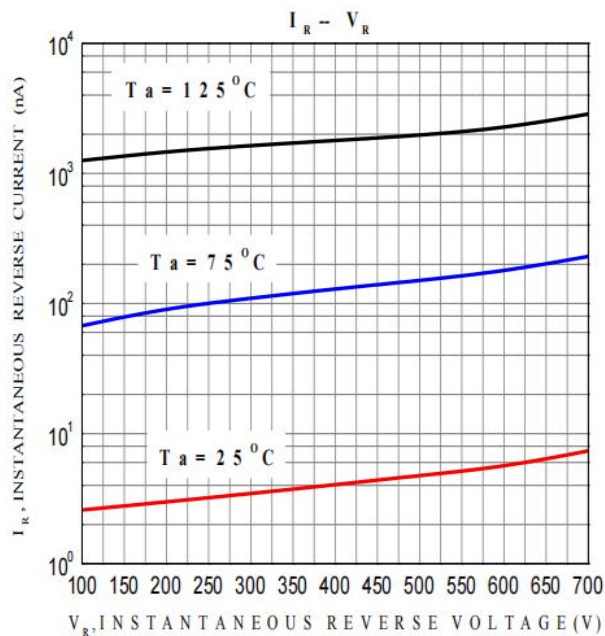
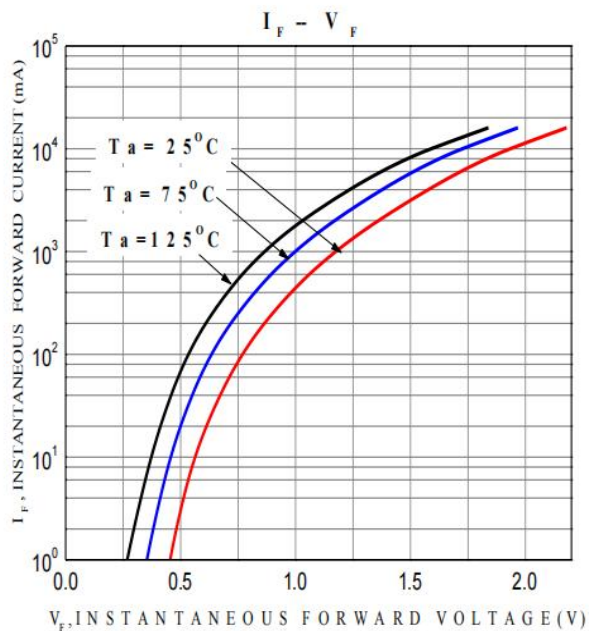
Parameter	Symbol	Value	Unit
Thermal Resistance, Junction to Case, Max.	$R_{\theta JC}$	2.0	$^{\circ}\text{C/W}$

Electrical Characteristics ($T_{AMB}=25^{\circ}\text{C}$, unless otherwise noted.)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Breakdown voltage	V_{BR}	$I_R=100\mu\text{A}$	700	760		V
Reverse current	I_R	$V_R=700\text{V}$			1	μA
Forward voltage	V_F	$I_F=8\text{A}$		2.1	2.6	V
Reverse recovery time	t_{rr}	$I_F=0.5\text{A}, I_R=1\text{A}, I_{RR}=0.25\text{A}$		22	30	ns
Total capacitance	C_{tot}	$V_R=0\text{V}, f=1\text{MHz}$		75		pF



Typical Characteristics





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Package Information

TO-263

Dimensions in mm

