



## Silicon Super Fast Recovery Diode

### MUR7040 thru MUR7060R

$V_{RRM} = 50\text{ V} - 600\text{ V}$

$I_F = 70\text{ A}$

#### Features

- High Surge Capability
- Types up to 600 V  $V_{RRM}$

DO-5 Package

#### Note:

1. Standard polarity: Stud is cathode.
2. Reverse polarity (R): Stud is anode.
3. Stud is base.



Maximum ratings, at  $T_J = 25\text{ }^\circ\text{C}$ , unless otherwise specified ("R" devices have leads reversed)

Parameter	Symbol	Conditions	MUR7040 (R)	MUR7060 (R)	Unit
Repetitive peak reverse voltage	$V_{RRM}$		400	600	V
RMS reverse voltage	$V_{RRMS}$		280	420	V
DC blocking voltage	$V_{DC}$		400	600	V
Continuous forward current	$I_F$	$T_C \leq 125\text{ }^\circ\text{C}$	70	70	A
Surge non-repetitive forward current, Half Sine Wave	$I_{FSM}$	$T_C = 25\text{ }^\circ\text{C}$ , $t_b = 8.3\text{ ms}$	1000	1000	A
Operating temperature	$T_J$		-65 to 175	-65 to 175	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-65 to 175	-65 to 175	$^\circ\text{C}$

Electrical characteristics, at  $T_J = 25\text{ }^\circ\text{C}$ , unless otherwise specified

Parameter	Symbol	Conditions	MUR7040 (R)	MUR7060 (R)	Unit
Diode forward voltage	$V_F$	$I_F = 70\text{ A}$ , $T_J = 25\text{ }^\circ\text{C}$	1.3	1.7	V
Reverse current	$I_R$	$V_R = 50\text{ V}$ , $T_J = 25\text{ }^\circ\text{C}$	25	25	$\mu\text{A}$
		$V_R = 50\text{ V}$ , $T_J = 125\text{ }^\circ\text{C}$	3	3	mA

#### Recovery Time

Maximum reverse recovery time	$T_{RR}$	$I_F = 0.5\text{ A}$ , $I_R = 1.0\text{ A}$ , $I_{RR} = 0.25\text{ A}$	75	90	nS
-------------------------------	----------	---	----	----	----

