



America Semiconductor

Silicon Super Fast Recovery Diode

**MUR5040 thru
MUR5060R**

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

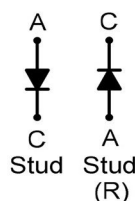
$I_F = 50\text{ A}$

Features

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

Note:

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



DO-5 Package

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

Parameter	Symbol	Conditions	MUR5040 (R)	MUR5060 (R)	Unit
Repetitive peak reverse voltage	V_{RRM}		400	600	V
RMS reverse voltage	V_{RMS}		280	420	V
DC blocking voltage	V_{DC}		400	600	V
Continuous forward current	I_F	$T_C \leq 125\text{ }^{\circ}\text{C}$	50	50	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ }^{\circ}\text{C}$, $t_p = 8.3\text{ ms}$	600	600	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	MUR5040 (R)	MUR5060 (R)	Unit
Diode forward voltage	V _F	I _F = 50 A, T _j = 25 °C	1.3	1.7	V
Reverse current	I _R	V _R = 50 V, T _j = 25 °C	10	10	μA
		V _R = 50 V, T _j = 125 °C	3	3	mA
Recovery Time					
Maximum reverse recovery time	T _{RR}	I _F =0.5 A, I _R =1.0 A, I _{RR} = 0.25 A	75	90	nS





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