

Silicon Super Fast Recovery Diode

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

$I_F = 100 \text{ A}$

Features

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

Twin Tower Package



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

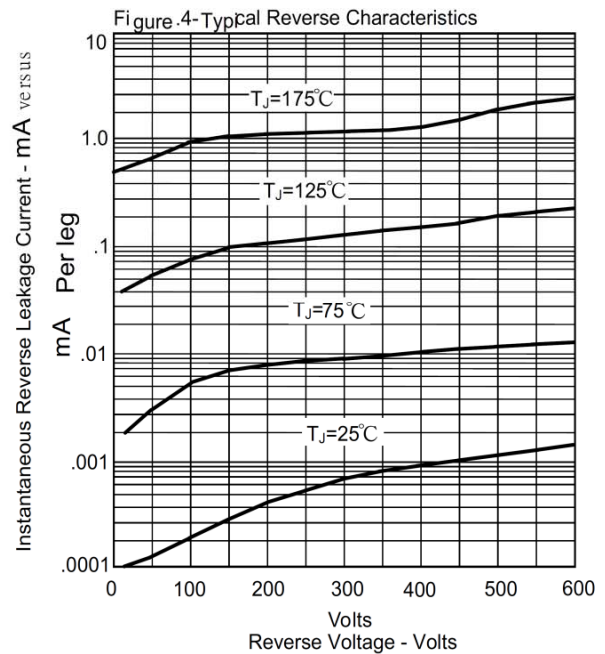
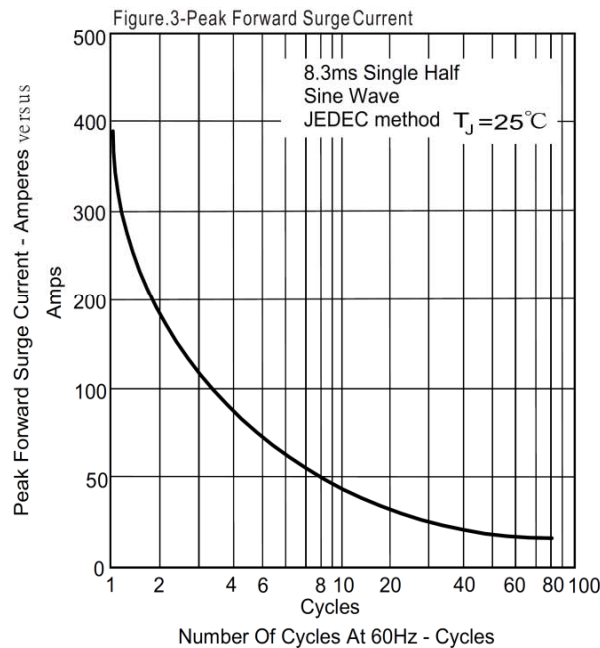
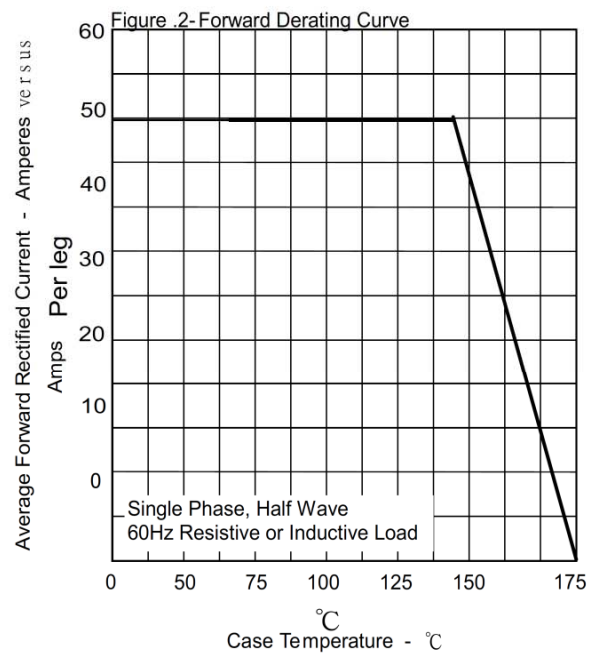
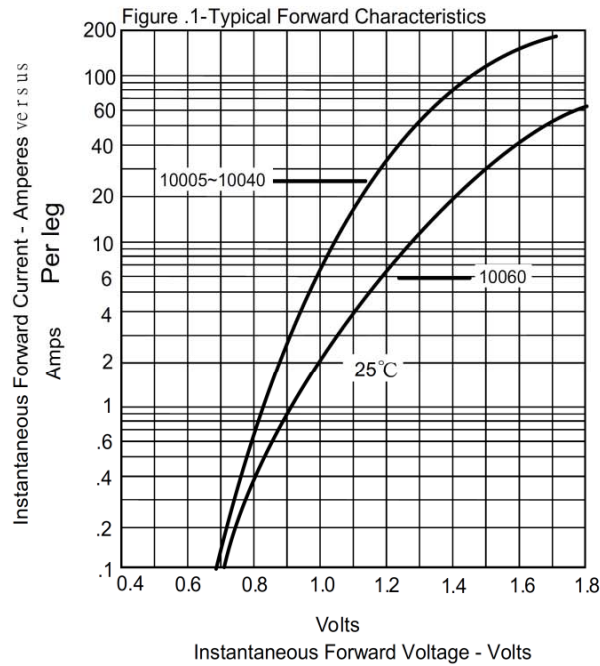
Parameter	Symbol	Conditions	MUR10040CT (R)	MUR10060CT (R)	Unit
Repetitive peak reverse voltage	V_{RRM}		400	600	V
RMS reverse voltage	V_{RMS}		280	420	V
DC blocking voltage	V_{DC}		400	600	V
Continuous forward current	I_F	$T_C \leq 140^\circ\text{C}$	100	100	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25^\circ\text{C}$, $t_p = 8.3 \text{ ms}$	400	400	A
Operating temperature	T_j		-40 to 175	-40 to 175	$^\circ\text{C}$
Storage temperature	T_{stg}		-40 to 175	-40 to 175	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	MUR10040CT (R)	MUR10060CT (R)	Unit
Diode forward voltage	V_F	$I_F = 50 \text{ A}$, $T_j = 25^\circ\text{C}$	1.3	1.7	V
Reverse current	I_R	$V_R = 50 \text{ V}$, $T_j = 25^\circ\text{C}$	25	25	μA
		$V_R = 50 \text{ V}$, $T_j = 125^\circ\text{C}$	1	1	mA

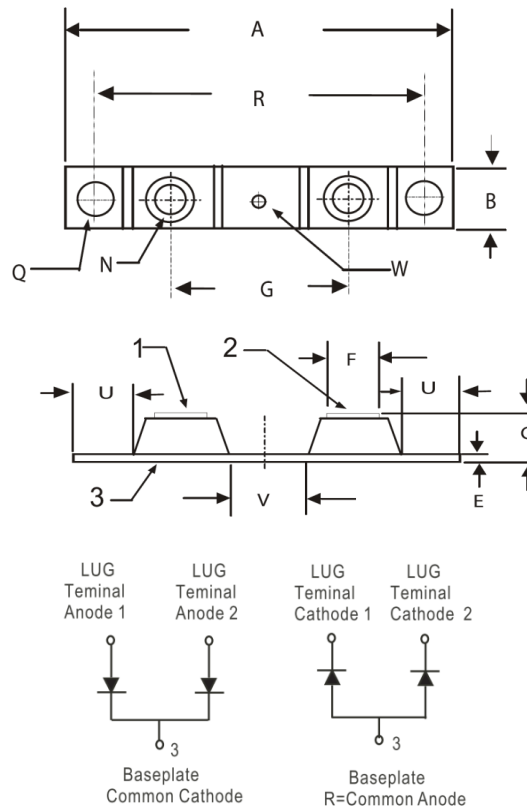
Recovery Time

Maximum reverse recovery time	T_{RR}	$I_F = 0.5 \text{ A}$, $I_R = 1.0 \text{ A}$, $I_{RR} = 0.25 \text{ A}$	90	110	nS
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Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



DIM	Inches		Millimeters	
	Min	Max	Min	Max
A	—	3.630	—	92.40
B	0.700	0.800	17.78	20.32
C	—	0.650	—	16.51
E	0.130	0.141	3.30	3.60
F	0.482	0.490	12.25	12.45
G	1.368	BSC	34.75	BSC
N	1/4-20 UNC FULL			
Q	0.275	0.290	6.99	7.37
R	3.150	BSC	80.01	BSC
U	0.600	—	15.24	—
V	0.312	0.370	7.92	9.40
W	0.180	0.195	4.57	4.95