



### Silicon Super Fast Recovery Diode

#### Features

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

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

$$I_F = 100 \text{ A}$$

Twin Tower Package



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

Parameter	Symbol	Conditions	MUR10005CT (R)	MUR10010CT (R)	MUR10020CT (R)	Unit
Repetitive peak reverse voltage	$V_{RRM}$		50	100	200	V
RMS reverse voltage	$V_{RMS}$		35	70	140	V
DC blocking voltage	$V_{DC}$		50	100	200	V
Continuous forward current	$I_F$	$T_C \leq 140^\circ\text{C}$	100	100	100	A
Surge non-repetitive forward current, Half Sine Wave	$I_{FSM}$	$T_C = 25^\circ\text{C}$ , $t_p = 8.3 \text{ ms}$	400	400	400	A
Operating temperature	$T_J$		-40 to 175	-40 to 175	-40 to 175	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-40 to 175	-40 to 175	-40 to 175	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	MUR10005CT (R)	MUR10010CT (R)	MUR10020CT (R)	Unit
Diode forward voltage	$V_F$	$I_F = 50 \text{ A}$ , $T_J = 25^\circ\text{C}$	1.3	1.3	1.3	V
Reverse current	$I_R$	$V_R = 50 \text{ V}$ , $T_J = 25^\circ\text{C}$	25	25	25	$\mu\text{A}$
		$V_R = 50 \text{ V}$ , $T_J = 125^\circ\text{C}$	1	1	1	mA
<b>Recovery Time</b>						
Maximum reverse recovery time	$T_{RR}$	$I_F = 0.5 \text{ A}$ , $I_{RR} = 1.0 \text{ A}$ , $I_{RR} = 0.25 \text{ A}$	75	75	75	nS

