

## Silicon Super Fast Recovery Diode

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

$I_F = 200\text{ A}$

### Features

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

TO-244 Package



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

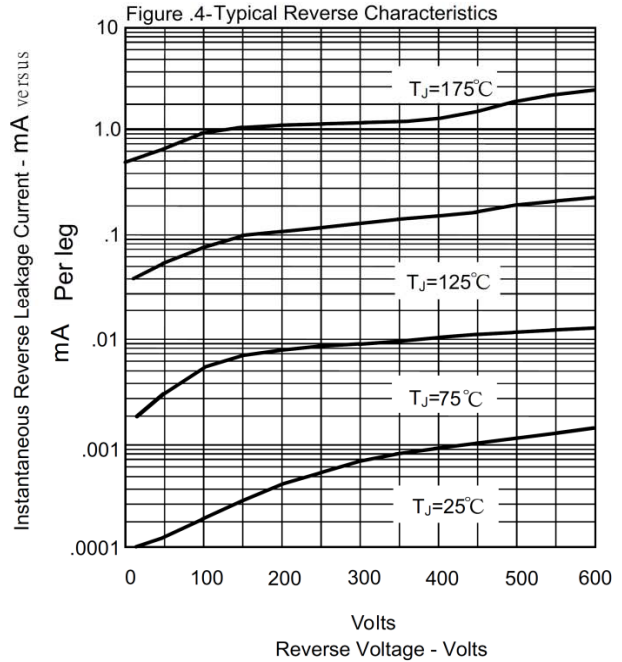
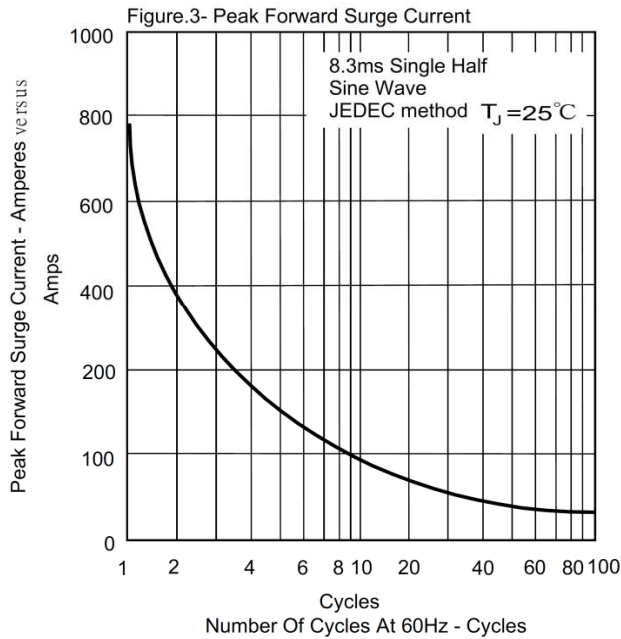
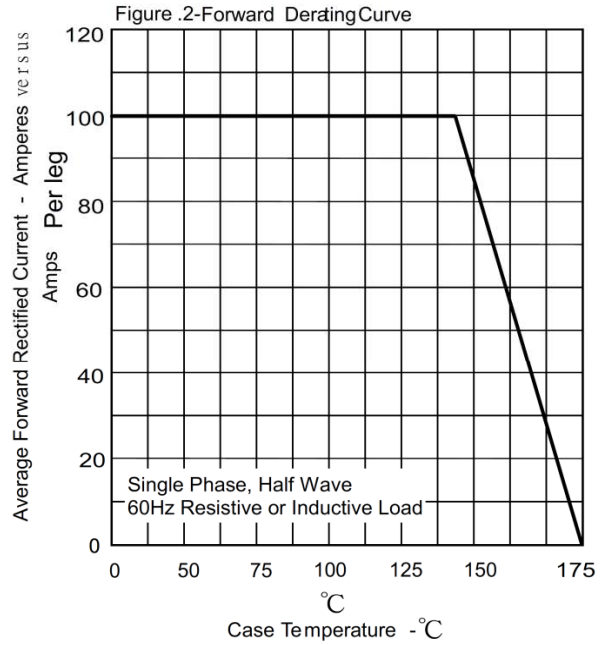
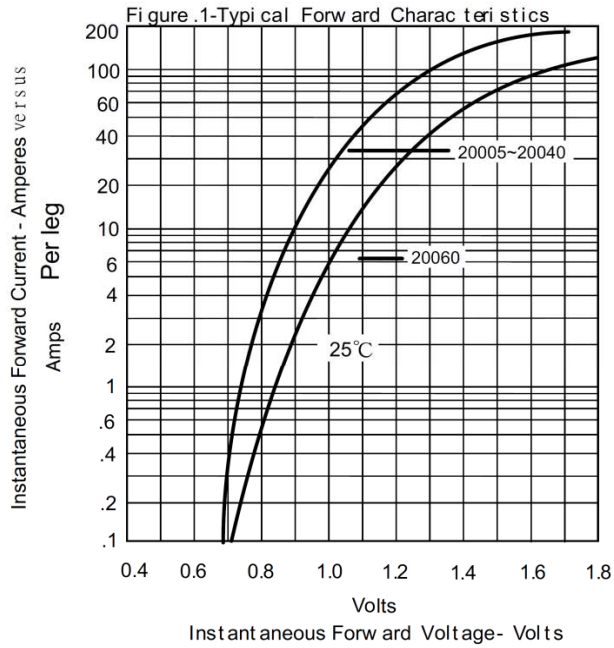
Parameter	Symbol	Conditions	MURF20005 (R)	MURF20010 (R)	MURF20020 (R)	Unit
Repetitive peak reverse voltage	$V_{RRM}$		50	100	200	V
RMS reverse voltage	$V_{RMS}$		35	70	140	V
DC blocking voltage	$V_{DC}$		50	100	200	V
Continuous forward current	$I_F$	$T_C \leq 140\text{ }^\circ\text{C}$	200	200	200	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ }^\circ\text{C}$ , $t_p = 8.3\text{ ms}$	800	800	800	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 $T_j = 25\text{ }^\circ\text{C}$ , unless otherwise specified

Parameter	Symbol	Conditions	MURF20005 (R)	MURF20010 (R)	MURF20020 (R)	Unit
Diode forward voltage	$V_F$	$I_F = 100\text{ A}$ , $T_j = 25\text{ }^\circ\text{C}$	1.3	1.3	1.3	V
Reverse current	$I_R$	$V_R = 50\text{ V}$ , $T_j = 25\text{ }^\circ\text{C}$	25	25	25	$\mu\text{A}$
		$V_R = 50\text{ V}$ , $T_j = 125\text{ }^\circ\text{C}$	1	1	1	mA

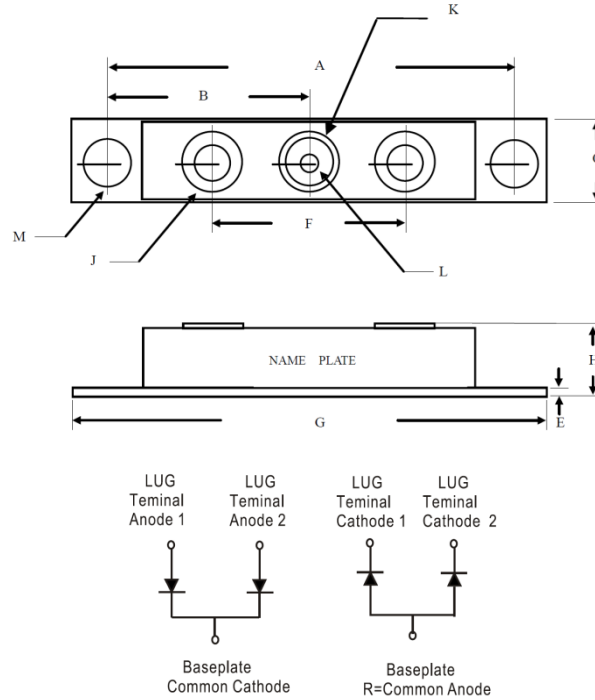
### Recovery Time

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



## Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



DIM	Inches		Millimeters	
	Min	Max	Min	Max
A	3.144	NOM	79.85	NOM
B	1.565	1.585	39.75	40.26
C	0.700	0.800	17.78	20.32
E	0.119	0.14	3.02	3.50
F	1.358	REF.	34.50	REF.
G	3.55	3.65	90.17	92.71
H	0.604	0.65	15.35	16.51
J	1/4-20 UNC FULL			
K	0.380	0.410	9.65	10.41
L	0.185	0.195	4.70	4.95
M	0.275	0.295	6.99	7.49