

Silicon Standard Recovery Diode

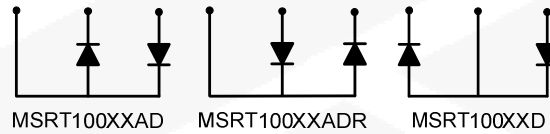
$V_{RRM} = 600\text{ V} - 1000\text{ V}$

$I_{F(AV)} = 100\text{ A}$

Features

- High Surge Capability
- Types from 600 V to 1000 V V_{RRM}
- Isolation Type Package
- Electrically Isolated Base Plate
- Not ESD Sensitive

Three Tower Package



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

Parameter	Symbol	Conditions	MSRT10060(A)D	MSRT10080(A)D	MSRT100100(A)D	Unit
Repetitive peak reverse voltage	V_{RRM}		600	800	1000	V
RMS reverse voltage	V_{RMS}		424	566	707	V
DC blocking voltage	V_{DC}		600	800	1000	V
Operating temperature	T_j		-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	MSRT10060(A)D	MSRT10080(A)D	MSRT100100(A)D	Unit
Average forward current (per leg)	$I_{F(AV)}$	$T_C = 140\text{ }^\circ\text{C}$	100	100	100	A
Peak forward surge current (per leg)	I_{FSM}	$t_p = 8.3\text{ ms}$, half sine	2000	2000	2000	A
Maximum instantaneous forward voltage (per leg)	V_F	$I_{FM} = 100\text{ A}$, $T_j = 25\text{ }^\circ\text{C}$	1.1	1.1	1.1	V
Maximum instantaneous reverse current at rated DC blocking voltage (per leg)	I_R	$T_j = 25\text{ }^\circ\text{C}$	10	10	10	μA
		$T_j = 150\text{ }^\circ\text{C}$	5	5	5	mA

Thermal characteristics

Maximum thermal resistance, junction - case (per leg)	$R_{\theta jc}$		0.45	0.45	0.45	$^\circ\text{C/W}$
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Figure .1- Typical Forward Characteristics

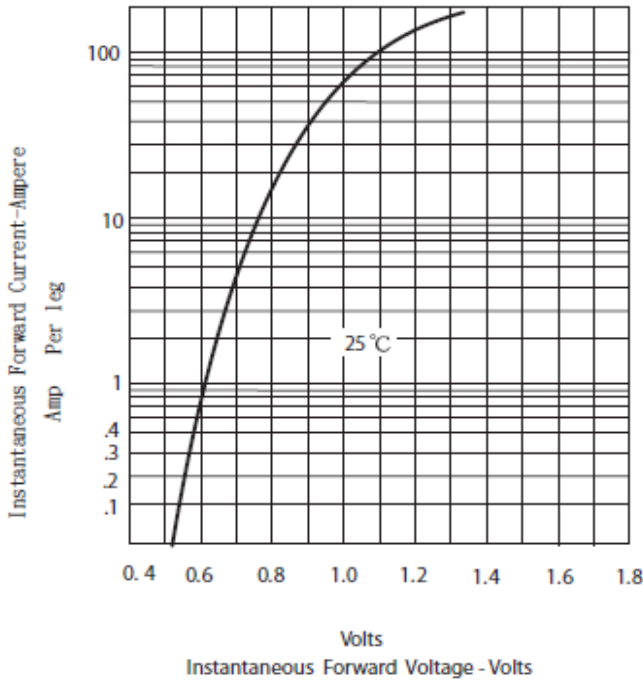


Figure.2 Forward Derating Curve

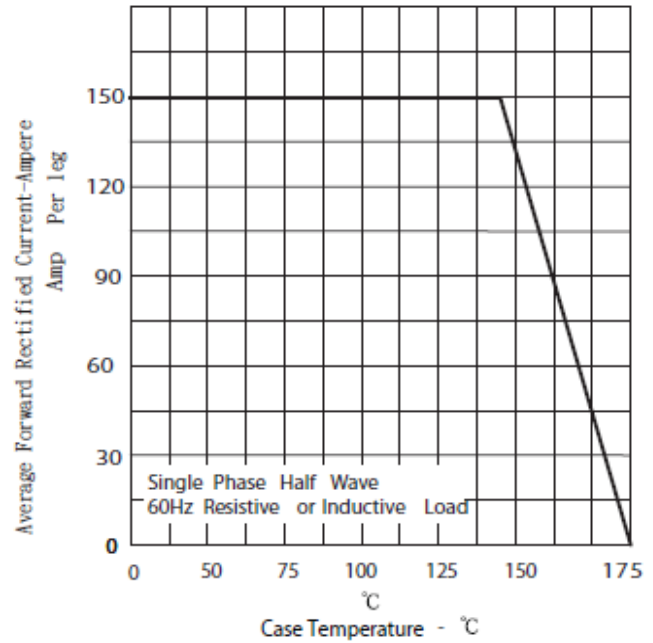


Figure 4 -Typical Reverse Characteristics

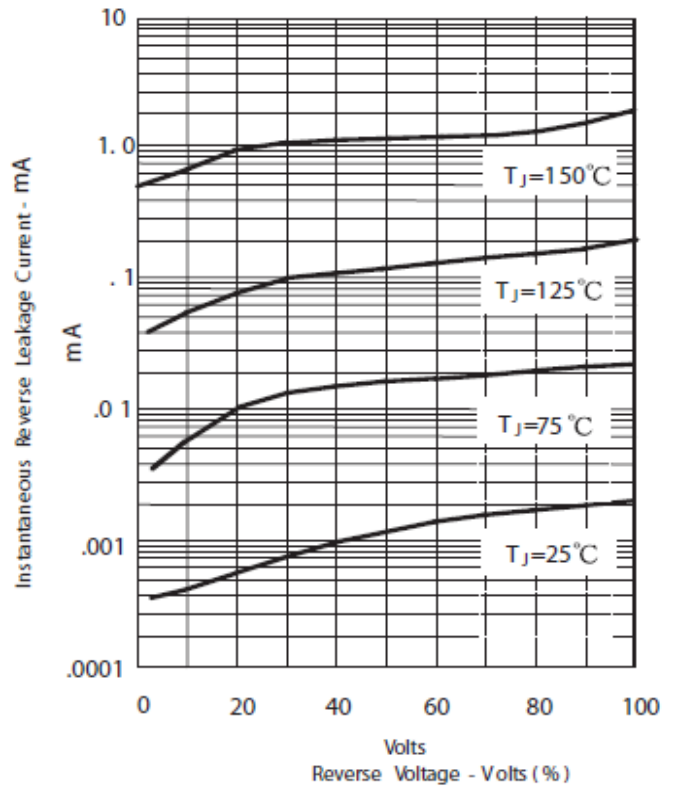
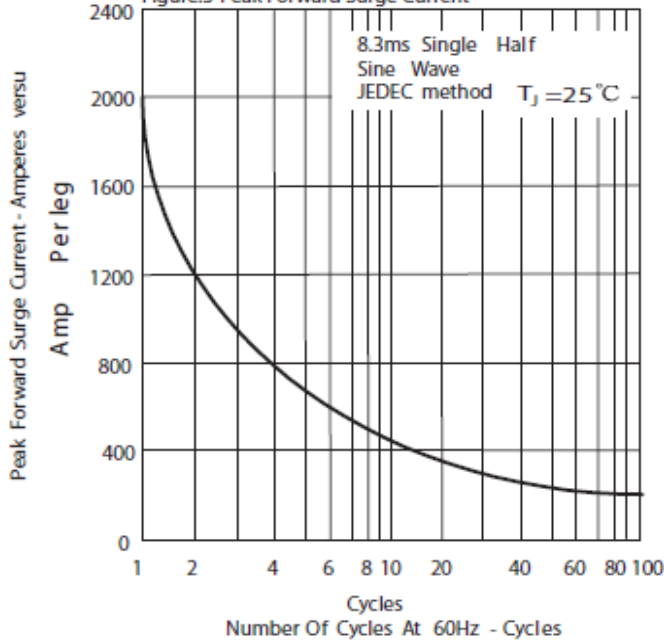
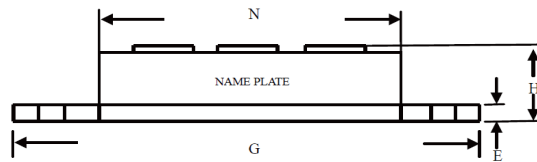
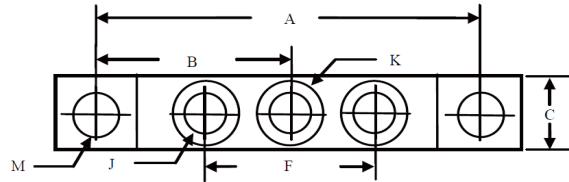


Figure.3-Peak Forward Surge Current

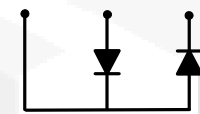


Package dimensions and terminal configuration

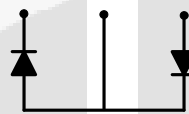
Product is marked with part number and terminal configuration.



MSRT100XXAD



MSRT100XXADR



MSRT100XXD

DIMENSIONS					
DIM	IN CHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	3.150	NOM	80.01	NOM	
B	1.565	1.585	39.75	40.26	
C	.700	.800	17.78	20.32	
E	.119	.132	3.02	3.35	
F	1.327	REF	33.72	REF	
G	3.55	3.65	90.17	92.71	
H	---	.73	---	18.30	
J	1/4 - 20 UNC FULL				
K	.472	.511	12	13	∅
M	.275	.295	6.99	7.49	∅
N	2.38	2.46	60.5	62.5	