MSRT100120(A)D thru MSRT100160(A)D

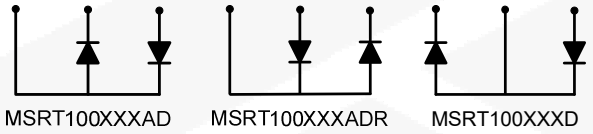
Silicon Standard Recovery Diode

V_{RRM} = 1200 V - 1600 V

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

Features

- High Surge Capability
- Types from 1200 V to 1600 V V_{RRM}
- Isolation Type Package
- Electrically Isolated Base Plate
- Not ESD Sensitive



Three Tower Package



Maximum ratings, at T_j = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	MSRT100120(A)D	MSRT100140(A)D	MSRT100160(A)D	Unit
Repetitive peak reverse voltage	V_{RRM}		1200	1400	1600	V
RMS reverse voltage	V_{RMS}		848	990	1131	V
DC blocking voltage	V_{DC}		1200	1400	1600	V
Operating temperature	T_j		-55 to 150	-55 to 150	-55 to 150	°C
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	°C

Electrical characteristics, at Tj = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	MSRT100120(A)D	MSRT100140(A)D	MSRT100160(A)D	Unit
Average forward current (per leg)	$I_{F(AV)}$	T_C = 140 °C	100	100	100	A
Peak forward surge current (per leg)	I_{FSM}	t_p = 8.3 ms, half sine	2000	2000	2000	A
Maximum instantaneous forward voltage (per leg)	V_F	I_{FM} = 100 A, T_j = 25 °C	1.1	1.1	1.1	V
Maximum instantaneous reverse current at rated DC blocking voltage (per leg)	I_R	T_j = 25 °C	10	10	10	µA
		T_j = 150 °C	5	5	5	mA
Thermal characteristics						
Maximum thermal resistance, junction - case (per leg)	$R_{\theta jc}$		0.45	0.45	0.45	°C/W

Figure .1- Typical Forward Characteristics

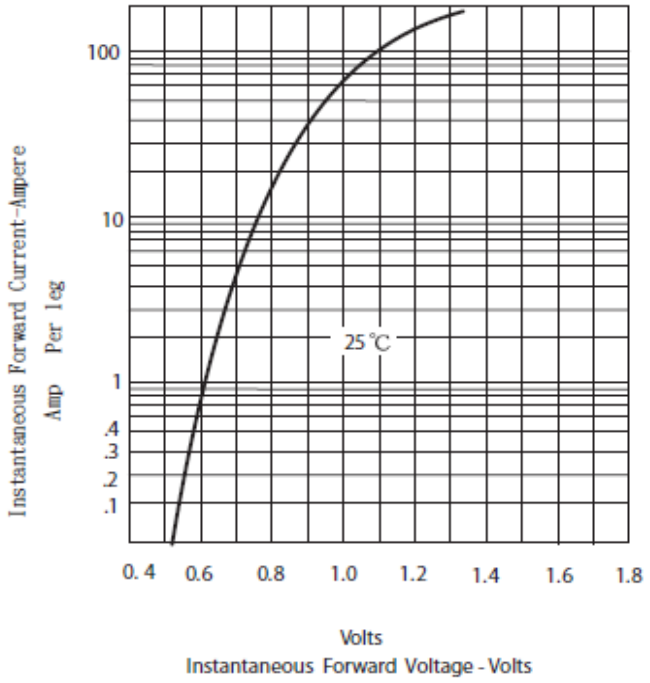


Figure. 2 Forward Derating Curve

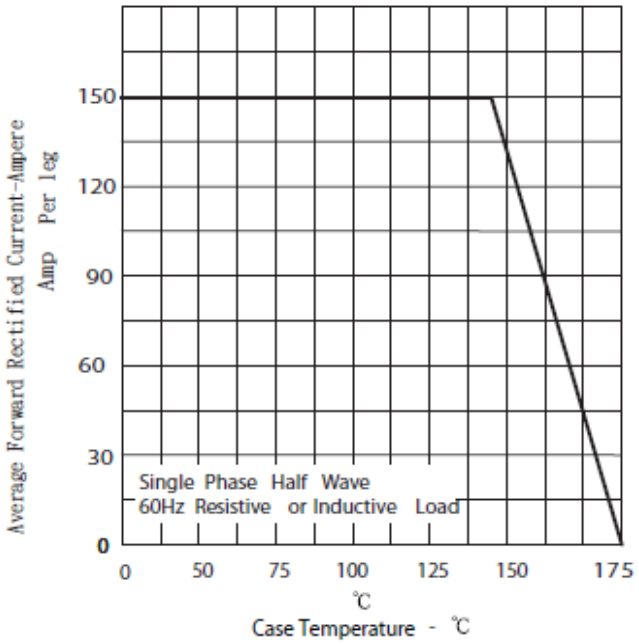


Figure.3-Peak Forward Surge Current

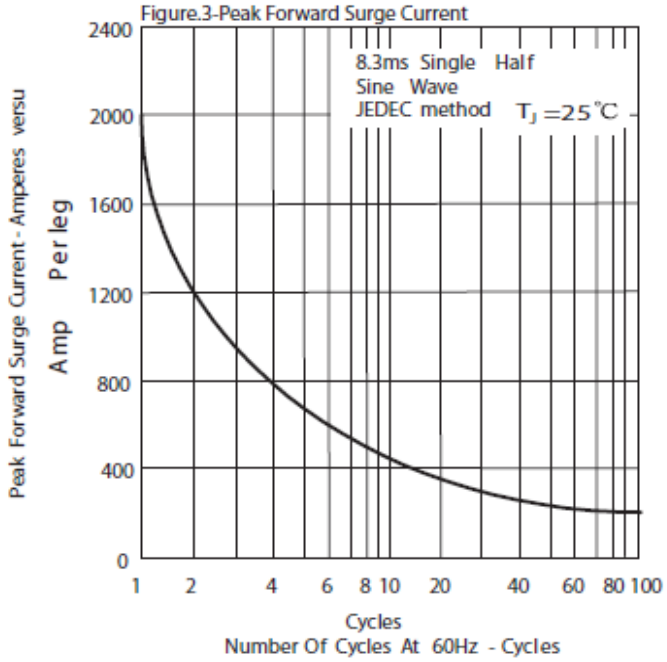
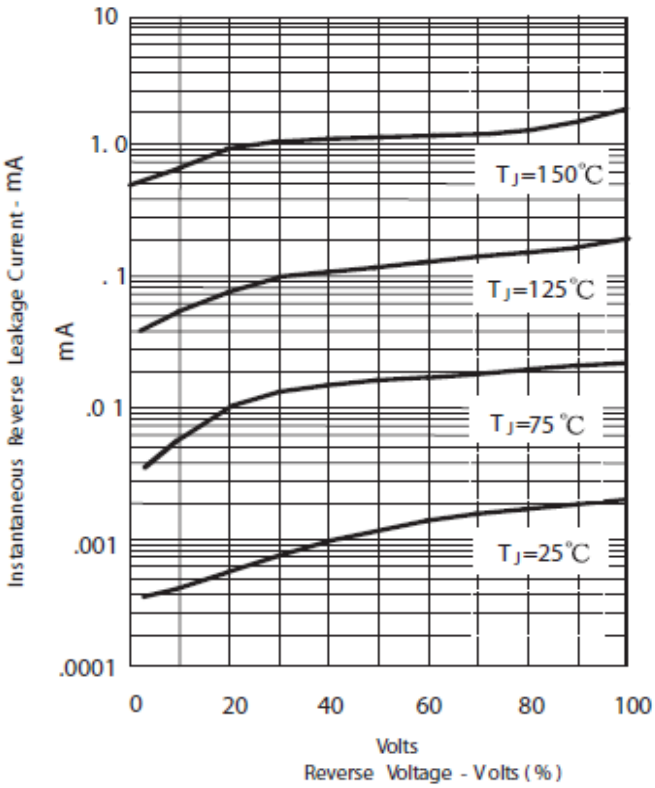
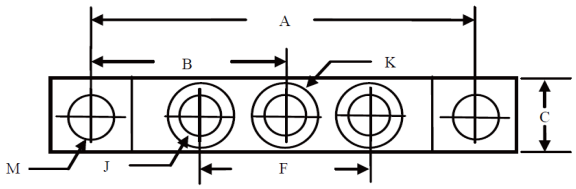


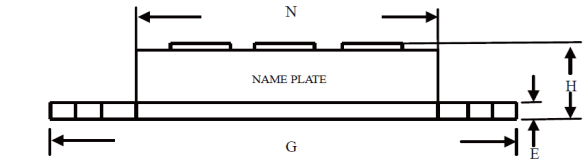
Figure .4 -Typical Reverse Characteristics

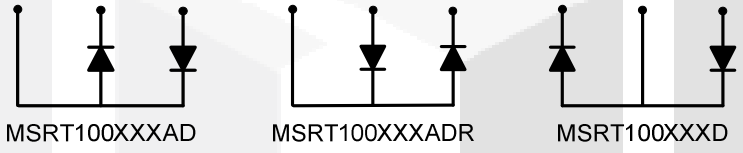


Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.







DIM	Inches		Millimeters	
	Min	Max	Min	Max
A	3.150	NOM	80.01	NOM
B	1.565	1.585	39.75	40.26
C	0.700	0.800	17.78	20.32
E	0.119	0.132	3.02	3.35
F	1.327	-----	33.72	-----
G	3.550	3.650	90.17	92.71
H	0.677	0.720	17.20	18.30
J	1/4 -20 UNC FULL			
K	0.472	0.511	12	13
M	0.275	0.295	6.99	7.49
N	2.380	2.460	60.5	62.5