MSRTA300120(A)D thru MSRTA300160(A)D

Silicon Standard Recovery Diode

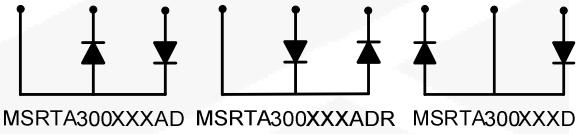
V_{RRM} = 1200 V - 1600 V

$I_{F(AV)}$ = 300 A

Features

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

Heavy Three Tower Package





RoHS COMPLIANT

REACH COMPLIANCE

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

Parameter	Symbol	Conditions	MSRTA300120(A)D	MSRTA300140(A)D	MSRTA300160(A)D	Unit
Repetitive peak reverse voltage	V_{RRM}		1200	1400	1600	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	MSRTA300120(A)D	MSRTA300140(A)D	MSRTA300160(A)D	Unit
Average forward current (per leg)	$I_{F(AV)}$	T_C = 125 °C	300	300	300	A
Peak forward surge current (per leg)	I_{FSM}	t_p = 8.3 ms, half sine	3800	3800	3800	A
Maximum instantaneous forward voltage (per leg)	V_F	I_{FM} = 300 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	20	20	20	µA
		T_j = 150 °C	10	10	10	mA
Thermal characteristics						
Maximum thermal resistance, junction - case (per leg)	$R_{\Theta jc}$		0.28	0.28	0.28	°C/W

Figure .1- Typical Forward Characteristics

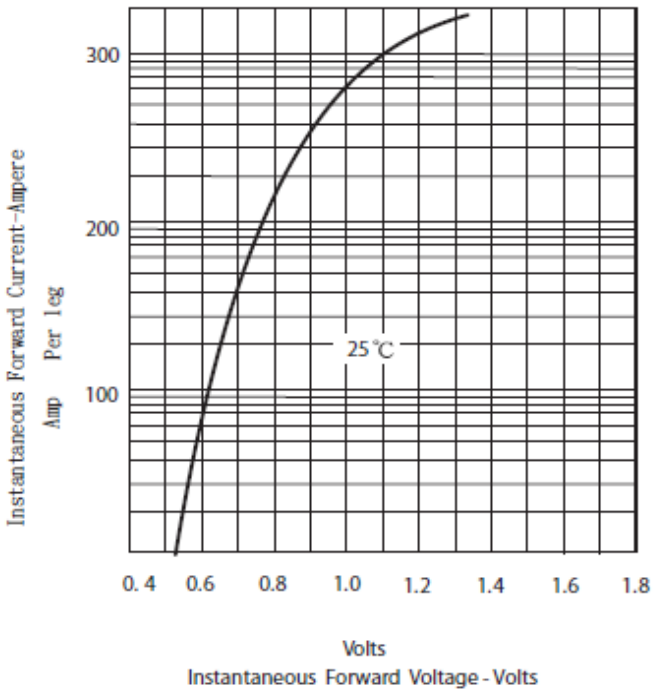


Figure. 2 Forward Derating Curve

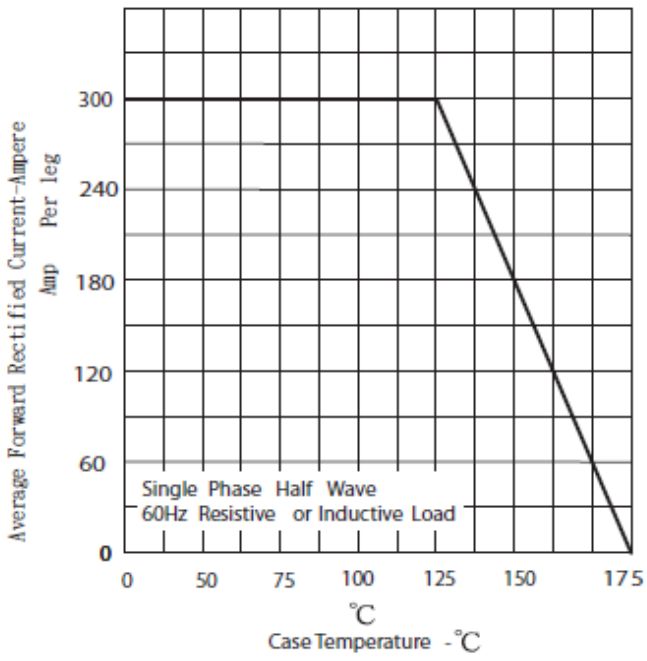


Figure.3-Peak Forward Surge Current

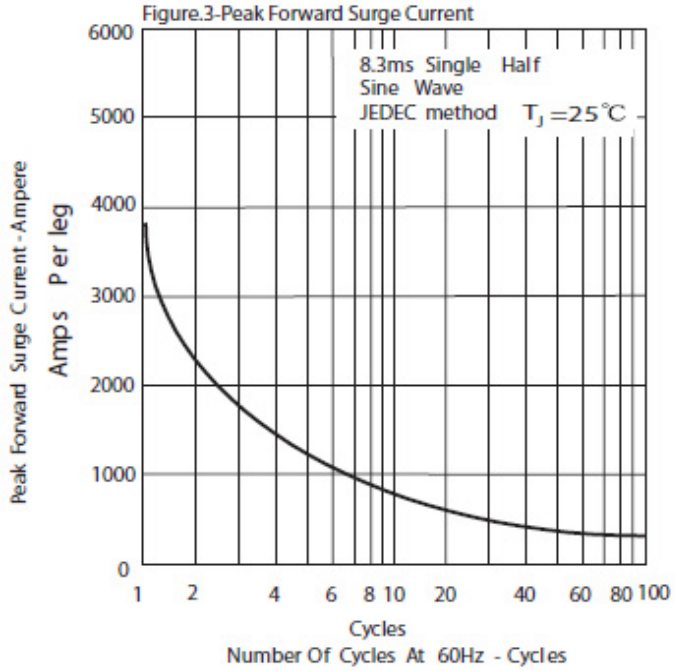
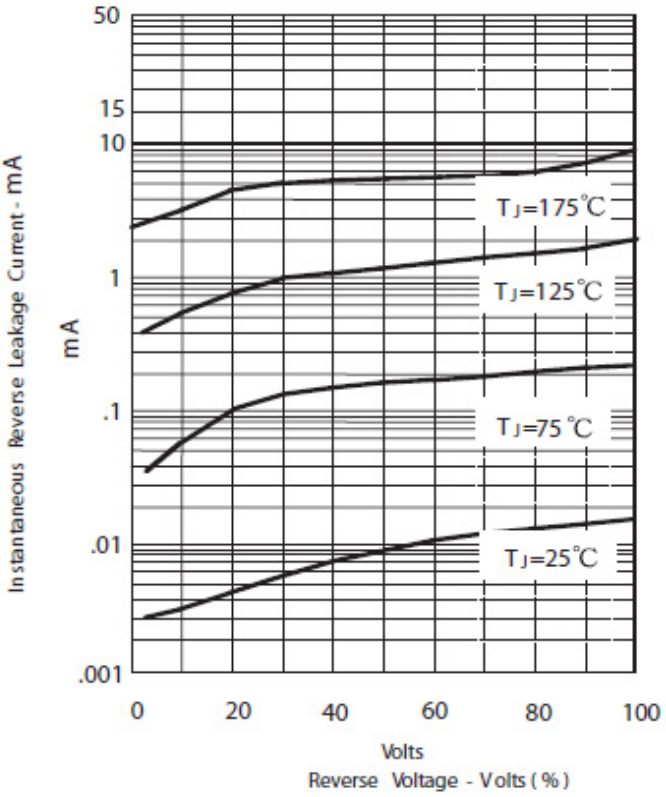
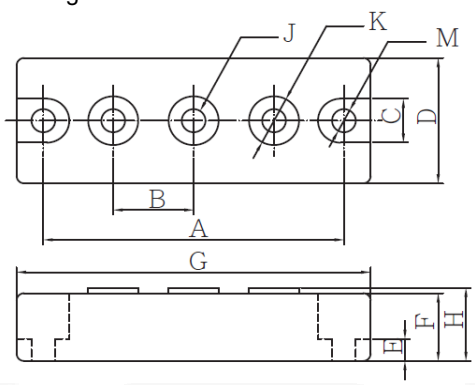


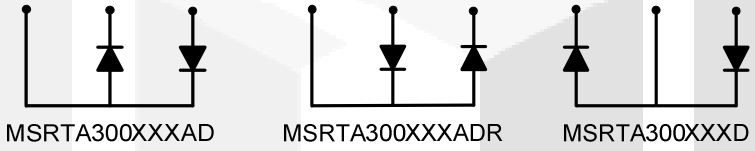
Figure .4 -Typical Reverse Characteristics



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.





DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	3.150	NOM	80.01	NOM	
B	.872	.892	22.15	22.65	
C	.465	.479	11.82	12.18	
D	1.337	1.356	33.95	34.45	
E	.230	.234	5.84	6.16	
F	.725	REF	18.42	REF	
G	3.668	3.768	93.17	95.71	
H	----	.791	---	20.10	
J	1/4-20 UNC FULL				
K	.509	.538	12.92	13.68	Ø
M	.238	.258	6.05	6.55	Ø