



Micro Commercial Components
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MDR1001 THRU MDR1007

Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

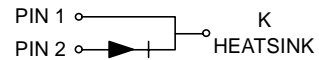
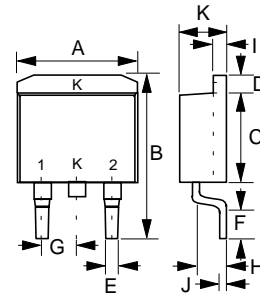
**10 Amp
 Glass Passivated
 Silicon Rectifiers
 50 to 1000 Volts**

Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 2.0°C/W Junction to Case

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MDR1001	50	35	50
MDR1002	100	70	100
MDR1003	200	140	200
MDR1004	400	280	400
MDR1005	600	420	600
MDR1006	800	560	800
MDR1007	1000	700	1000

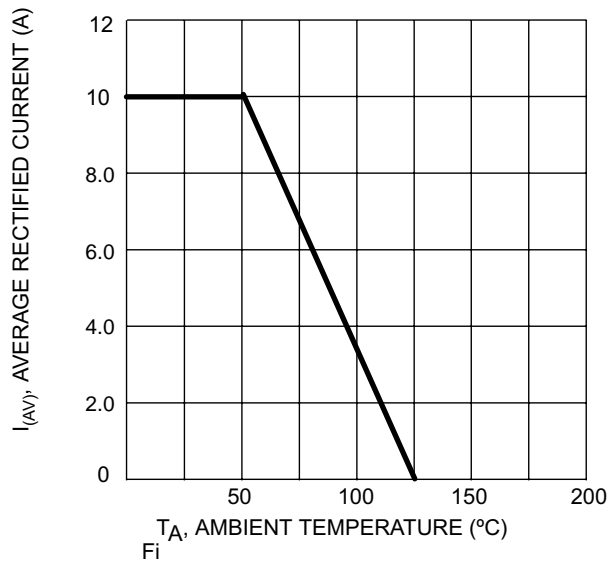
D²PAK



Electrical Characteristics @ 25°C Unless Otherwise Specified

Maximum Average Forward Current	$I_{F(AV)}$	10 A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	600A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.1V	$I_F=10\text{A}$ $T_A=25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 250 μA	$T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$
Typical Junction Capacitance	C_J	100pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.380	.421	9.65	10.69	
B	.575	.625	14.60	15.88	
C	.325	.364	8.25	9.25	
D	.045	.055	1.14	1.40	
E	.020	.045	0.51	1.14	
F	.090	.110	2.29	2.79	
G	.090	.110	2.29	2.79	
H	.080	.115	2.03	2.92	
I	.045	.055	1.14	1.40	
J	.012	.025	0.30	0.64	
K	.172	.190	4.37	4.83	



g. 1 Forward Current Derating Curve

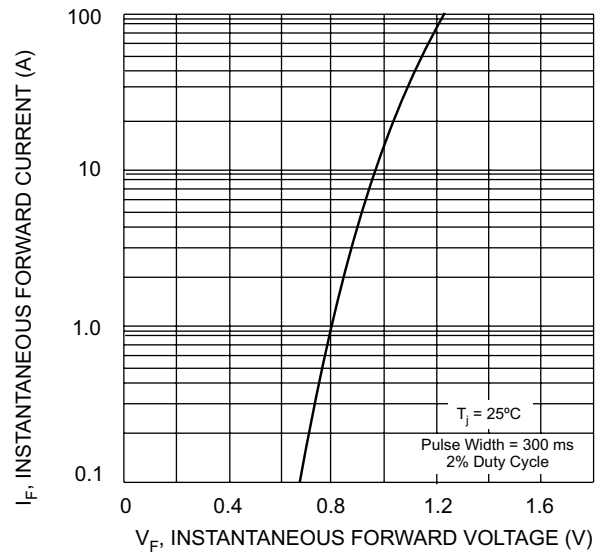


Fig. 2 Typical Forward Characteristics

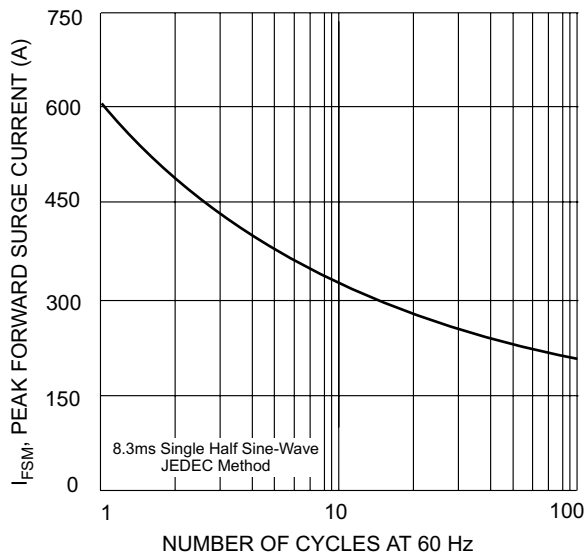


Fig. 3 Maximum Non-Repetitive Peak Forward Surge Current

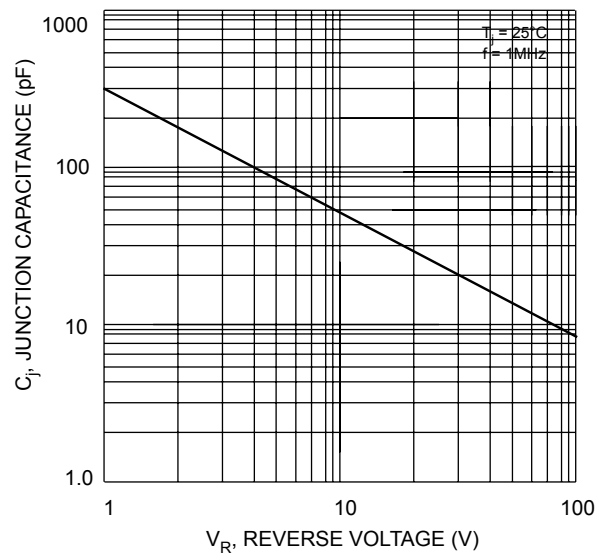


Fig. 4 Typical Junction Capacitance