



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

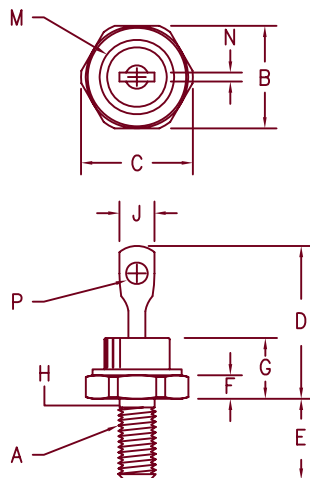
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30 Amp Schottky Rectifier SD41, SD4145



Notes:

1. 10-32 UNF3A threads
2. Full threads within 2 1/2 threads
3. Standard Polarity:
Stud is Cathode. Reverse Polarity Stud is Anode

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	---	---	---	1
B	.424	.437	10.77	11.10	
C	---	.505	---	12.82	
D	.600	.800	15.24	20.32	
E	.422	.453	10.72	11.50	
F	.075	.175	1.91	4.44	
G	---	.405	---	10.29	
H	.163	.189	4.15	4.80	2
J	---	.310	---	7.87	
M	---	.350	---	8.89	Dia.
N	.020	.065	.510	1.65	
P	.060	.100	1.53	2.54	Dia.

D0203AA (D04)

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
SD41*	35V	35V
SD4145*	45V	45V

*Add Suffix R For Reverse Polarity

- Schottky Barrier Rectifier
- Guard Ring Protection
- Low Forward Voltage
- VRRM - 35 & 45 Volts
- 30 Amperes
- Reverse Energy Tested

Electrical Characteristics

Average forward current	I _{F(AV)} 30 Amps	T _C = 140°C, Square wave, R _{θJC} = 1.6°C/W 8.3 ms, half sine T _J = 175°C f = 1 KHz, 25°C, 1 μsec Square wave
Maximum surge current	I _{FSM} 600 Amps	
Max repetitive peak reverse current	I _{R(OV)} 2 Amps	
Max peak forward voltage	V _{FM} .57 Volts	I _{FM} = 30A: T _J = 175°C*
Max peak forward voltage	V _{FM} .68 Volts	I _{FM} = 30A: T _J = 25°C*
Max peak reverse current	I _{RM} 25 mA	V _{RRM} , T _J = 125°C*
Max peak reverse current	I _{RM} 1.5 mA	V _{RRM} , T _J = 25°C
Typical junction capacitance	C _J 1350 pF	V _R = 5.0V, T _J = 25°C

*Pulse test: Pulse width 300 μsec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temp range	T _{STG}	-55°C to 175°C
Operating junction temp range	T _J	-55°C to 175°C
Max thermal resistance	R _{θJC}	1.6°C/W Junction to case
Typical thermal resistance (greased)	R _{θCS}	0.5°C/W Case to sink
Mounting torque		12-15 inch pounds
Weight		0.2 ounces (6.0 grams) typical



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SD41, SD4145

Figure 1
Typical Forward Characteristics

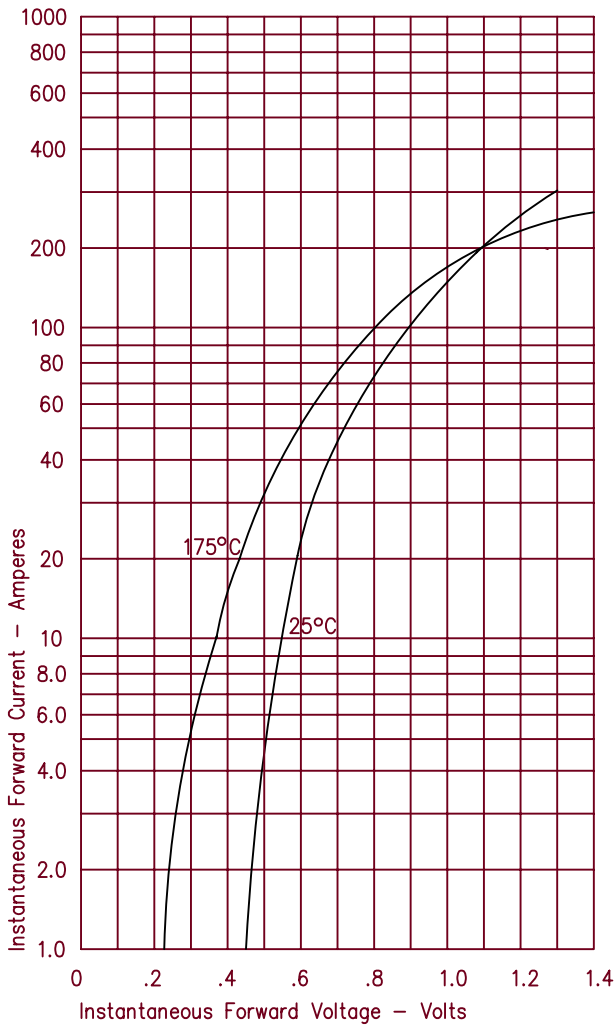


Figure 3
Typical Junction Capacitance

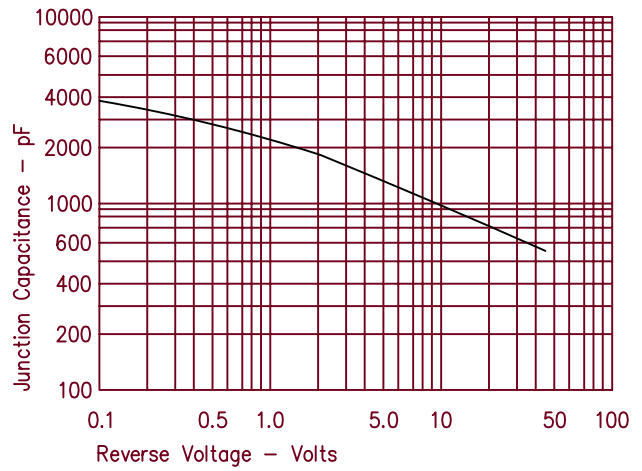


Figure 4
Forward Current Derating

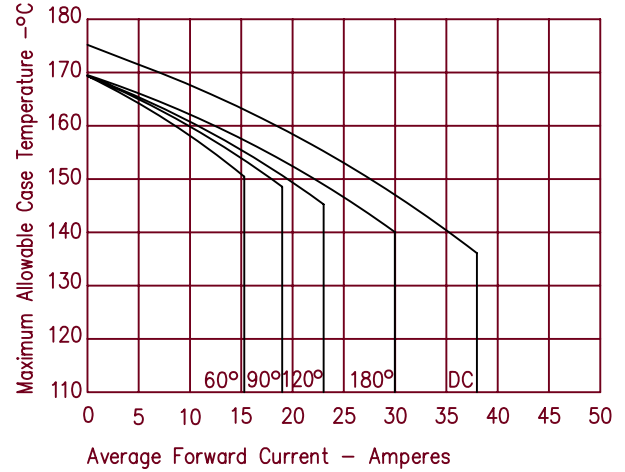


Figure 2
Typical Reverse Characteristics

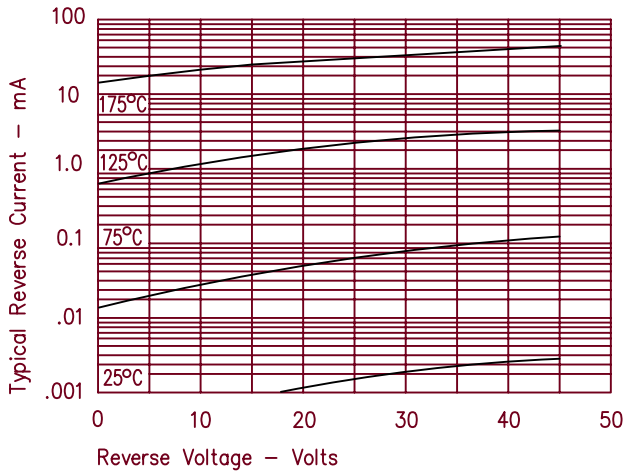


Figure 5
Maximum Forward Power Dissipation

