



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

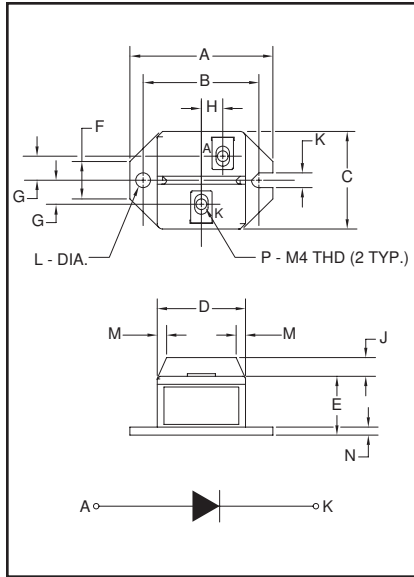
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Fast Recovery Single Diode Modules
100 Amperes/600-1200 Volts



Outline Drawing

Dimension	Inches	Millimeters
A	2.087	53
B	1.705±0.008	43.3±0.2
C	1.417	36
D	1.299	33
E	0.866	22
F	0.551	14
G	0.354	9
H	0.315	8
J	0.276	7
K	0.217	5.5
L	0.217 Dia.	Dia. 5.5
M	0.138	3.5
N	0.118	3
P	M4 Metric	M4




CS240610, CS241210
Fast Recovery
Single Diode Modules
100 Amperes/600-1200 Volts

Description:

Powerex Fast Recovery Single Diode Modules are designed for use in applications requiring fast switching. The modules are isolated for easy mounting with other components on common heatsinks. POW-R-BLOK™ has been tested and recognized by Underwriters Laboratories (QQX2 Power Switching Semiconductors).

Features:

- Isolated Mounting
- Planar Chips
- UL Recognized 

Applications:

- Inverters
- Choppers
- Switching Power Supplies
- Free Wheeling

Ordering Information:

Select the complete eight digit module part number you desire from the table below.
Example: CS241210 is a 1200 Volt, 100 Ampere Fast Recovery Single Diode Module.

Type	Voltage Volts (x100)	Current Rating Amperes (x10)
CS24	06	10
	12	



Powerex, Inc., 200 Hillis Street, Youngwood, Pennsylvania 15697-1800 (724) 925-7272

CS240610, CS241210
Fast Recovery Single Diode Modules
100 Amperes/600-1200 Volts

Absolute Maximum Ratings

Characteristics	Symbol	CS240610	CS241210	Units
Peak Reverse Blocking Voltage	V_{RRM}	600	1200	Volts
Transient Peak Reverse Blocking Voltage (Non-Repetitive), $t < 5\text{ms}$	V_{RSM}	720	1350	Volts
DC Reverse Blocking Voltage	$V_{R(DC)}$	480	960	Volts
DC Current, $T_C = 75^\circ\text{C}$	$I_{F(DC)}$	100	100	Amperes
Peak One-Cycle Surge (Non-Repetitive) On-State Current (60Hz)	I_{FSM}	2000	2000	Amperes
Peak One-Cycle Surge (Non-Repetitive) On-State Current (50Hz)	I_{FSM}	1825	1825	Amperes
I^2t (for Fusing), 8.3 milliseconds	I^2t	16700	16700	A^2sec
Storage Temperature	T_{STG}	-40 to 125	-40 to 125	$^\circ\text{C}$
Operating Temperature	T_j	-40 to 150	-40 to 150	$^\circ\text{C}$
Maximum Mounting Torque M5 Mounting Screw	—	17	17	in.-lb.
Maximum Mounting Torque M4 Terminal Screw	—	12	12	in.-lb.
Module Weight (Typical)	—	90	90	Grams
V Isolation	V_{RMS}	2500	2500	Volts

CS240610, CS241210
Fast Recovery Single Diode Modules
 100 Amperes/600-1200 Volts

Electrical and Thermal Characteristics, $T_j = 25^\circ\text{C}$ unless otherwise specified

Characteristics	Symbol	Test Conditions	CS240610/CS241210	Units
Blocking State Maximums				
Reverse Leakage Current, Peak	I_{RRM}	$T_j = 150^\circ\text{C}$, $V_{RRM} = \text{Rated}$	20	mA
Conducting State Maximums				
Peak On-State Voltage	V_{FM}	$I_{FM} = 100\text{A}$	1.5	Volts
Switching Minimums				
Reverse Recovery Time	t_{rr}	$I_{FM} = 100\text{A}$, $T_j = 150^\circ\text{C}$ $di/dt = -200\text{A}/\mu\text{s}$, $V_R = 1/2 V_{RRM}$	0.8	μs
Reverse Recovery Charge	Q_{rr}	$I_{FM} = 100\text{A}$, $T_j = 150^\circ\text{C}$ $di/dt = -200\text{A}/\mu\text{s}$, $V_R = 1/2 V_{RRM}$	60	μC
Thermal Maximums				
Thermal Resistance, Junction-to-Case	$R_{\theta(J-C)}$	Per Module	0.5	$^\circ\text{C}/\text{Watt}$
Thermal Resistance, Case-to-Sink (Lubricated)	$R_{\theta(C-S)}$	Per Module	0.15	$^\circ\text{C}/\text{Watt}$

CS240610, CS241210
Dual SCR POW-R-BLOK™ Modules
 100 Amperes/600-1200 Volts

