



## CMD SERIES

## Power Modules

## Features

- High Thermal Efficiency
- Complete Power Control Circuits in a Single Package

## DESCRIPTION

These modules provide complete power control in a single package, utilizing high thermal efficiency to assure long life and reliable performance. Six standard models provide 2500 Vrms isolation from all terminals to ceramic base and are UL recognition pending.

## PART NUMBER IDENTIFICATION

EX.: CMD25/12

Series Type	Current	Voltage
CMD-Case style	25 - 25 Amps 40 - 40 Amps	06 - 600 08 - 800 10 - 1000 12 - 1200

## ELECTRICAL SPECIFICATION

25

40

SYMBOL	SPECIFICATION	RATINGS	
$I_D$	Maximum DC Output Current ( $T_c = 85^\circ\text{C}$ )	25 Amps	40 Amps
$V_F$	Maximum Voltage Drop @ Amps Peak	1.65V @ IF=25A	1.60V @ IF=40A
$T_J$	Operating Junction Temperature Range	-40°C to +125°C	
di/dt	Critical Rate of Rise of On-State Current @ $T_J=125^\circ\text{C}$	100A/ $\mu\text{s}$	100A/ $\mu\text{s}$
dv/dt	Critical Rate of Rise of Off-State Voltage [V/ $\mu\text{s}$ ]	500V/ $\mu\text{s}$	500V/ $\mu\text{s}$
$V_{RRM}$	Repetitive Peak Reverse Voltage (AC Line)	400 (120 Vac) 600 (240 Vac) 1000 (380 Vac) 1200 (480 Vac)	
$I_{TSM}$	Maximum Non-Repetitive Surge Current ( $1/2$ Cycle, 60Hz)	250A	600A
$I^2T$	Maximum $I^2T$ for Fusing ( $t=8.3\text{ms}$ ) [ $\text{A}^2 \text{sec}$ ]	260	1500
$R_{qJC}$	Maximum Thermal Resistance Junction to Ceramic Base per Chip	0.9°K/W	0.7°K/W
$V_{ISOL}$	Isolation Voltage	2500 V <sub>RMS</sub>	2500 V <sub>RMS</sub>

## MECHANICAL SPECIFICATIONS

Weight: (typical)

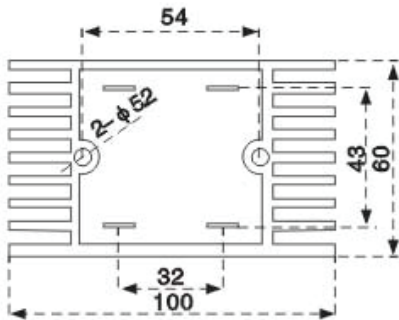
1.7 oz. (43g)

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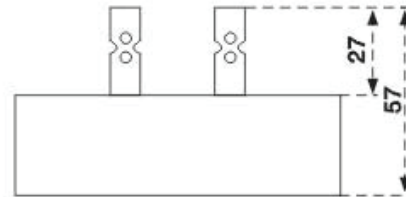
For recommended applications and more information contact:  
USA: Sales Support (888) 882-8689

Email: sales@c3semi.com WEB SITE: <http://www.C3semi.com>

## MECHANICAL DIMENSIONS AND CIRCUIT DIAGRAM

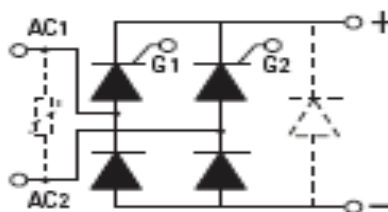


Package Dimensions TOP  
25-40 Amp Models



Package Dimensions SIDE  
25 and 40 Amp Models

### SERIES CMD CIRCUIT



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For recommended applications and more information contact:  
USA: Sales Support (888) 882-8689  
C3 Semiconductors, LLC. 2320 Paseo de las Americas, Ste. 104, San Diego, CA 92154  
Email: sales@c3semi.com WEB SITE: <http://www.C3semi.com>