

Product Preview **Electronic Ignition Control Circuit**

The MCCF79076, in conjunction with an appropriate Motorola Power Darlington Transistor, provides an economical solution for automotive ignition applications. The MCCF79076 offers optimum performance by providing closed loop operation of the Power Darlington in controlling the ignition coil current.

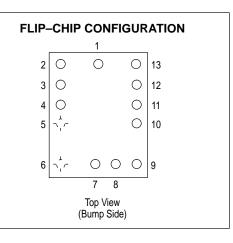
The MCCF79076 incorporates Flip-Chip Technology which involves the formation of solder bumps, rather than traditional wire bonds, to establish mechanical and electrical contact to the semiconductor chip. This process affords a unique device having improved reliability at elevated operating temperatures.

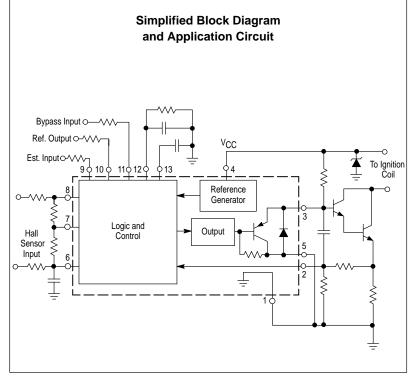
- Solder Bumped for Flip–Chip Assembly
- Ignition Coil Voltage Internally Limited to 375 V
- Coil Current Limiting to 7.5 A
- Output On–Time (Dwell) Control
- Dwell Feedback Control to Sense Coil Variation
- Hall Sensor Input
- $-30^{\circ}C \le T_A \le +140^{\circ}C$ Ambient Operating Temperature



MC79076 MCCF79076

> **DW SUFFIX** PLASTIC PACKAGE CASE 751G (SO-16L)





BUMP CONNECTIONS

- 1. High Ground
- 2. Output Current Limit
- 3. Dwell Output
- 4. Supply
- 5. Low Ground
- 6. Reference Dwell Input 7. Advance Input
- 8. Bias Voltage
- 9. Est Input
- 10. Reference Output
- 11. Bypass Input
- 12. 900 RPM Detector
- 13. Dwell Control

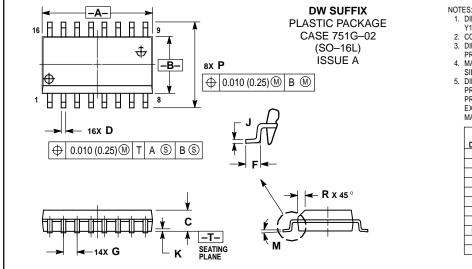
ORDERING INFORMATION

Device	Operating Temperature Range	Package
MCCF79076	$T_A = -30^{\circ} \text{ to } +125^{\circ}\text{C}$	Flip–Chip
MC79076DW		SO-16L

This document contains information on a product under development. Motorola reserves the right © Motorola, Inc. 1995 to change or discontinue this product without notice.

MC79076 MCCF79076

OUTLINE DIMENSIONS



IOTES: 1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.

CONTROLLING DIMENSION: MILLIMETER.
DIMENSIONS A AND B DO NOT INCLUDE MOLD

PROTRUSION.

 MAXIMUM MOLD PROTRUSION 0.15 (0.006) PER SIDE.

5. DIMENSION D DOES NOT INCLUDE DAMBAR

PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL BE 0.13 (0.005) TOTAL IN EXCESS OF D DIMENSION AT MAXIMUM MATERIAL CONDITION.

	MILLIMETERS		INCHES	
DIM	MIN	MAX	MIN	MAX
Α	10.15	10.45	0.400	0.411
В	7.40	7.60	0.292	0.299
С	2.35	2.65	0.093	0.104
D	0.35	0.49	0.014	0.019
F	0.50	0.90	0.020	0.035
G	1.27 BSC		0.050 BSC	
J	0.25	0.32	0.010	0.012
Κ	0.10	0.25	0.004	0.009
Μ	0 °	7 °	0 °	7 °
Р	10.05	10.55	0.395	0.415
R	0.25	0.75	0.010	0.029

Motorola reserves the right to make changes without further notice to any products herein. Motorola makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Motorola assume any liability arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation consequential or incidental damages. "Typical" parameters can and do vary in different applications. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. Motorola does not convey any license under its patent rights nor the rights of others. Motorola products are not designed, intended, or authorized for use as components in systems intended for surgical implant into the body, or other applications intended to support or sustain life, or for any other application in which the failure of the Motorola product could create a situation where personal injury or death may occur. Should Buyer purchase or use Motorola products for any such unintended or unauthorized application, Buyer shall indemnify and hold Motorola and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that Motorola was negligent regarding the design or manufacture of the part. Motorola and **M** are registered trademarks of Motorola, Inc. Motorola, Inc. is an Equal Opportunity/Affirmative Action Employer.

How to reach us:

USA/EUROPE: Motorola Literature Distribution; P.O. Box 20912; Phoenix, Arizona 85036. 1–800–441–2447 JAPAN: Nippon Motorola Ltd.; Tatsumi–SPD–JLDC, Toshikatsu Otsuki, 6F Seibu–Butsuryu–Center, 3–14–2 Tatsumi Koto–Ku, Tokyo 135, Japan. 03–3521–8315

MFAX: RMFAX0@email.sps.mot.com – TOUCHTONE (602) 244–6609 INTERNET: http://Design-NET.com

HONG KONG: Motorola Semiconductors H.K. Ltd.; 8B Tai Ping Industrial Park, 51 Ting Kok Road, Tai Po, N.T., Hong Kong. 852–26629298



 \Diamond