PMD16K SERIES NPN
PMD17K SERIES PNP

COMPLEMENTARY SILICON DARLINGTON POWER TRANSISTORS

TO-3 CASE

Central Semiconductor Corp.

www.centralsemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR PMD16K, PMD17K series types are complementary silicon Darlington power transistors, manufactured by the epitaxial base process, mounted in a hermetically sealed metal package, and designed for power switching applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_C=25°C)	SYMBOL	PMD16K60 PMD17K60	PMD16K80 PMD17K80	PMD16K100 PMD17K100	UNITS
Collector-Base Voltage	V_{CBO}	60	80	100	V
Collector-Emitter Voltage	V_{CEO}	60	80	100	V
Emitter-Base Voltage	V_{EBO}		5.0		V
Continuous Collector Current	I_C		20		A
Peak Collector Current	I_{CM}		40		A
Continuous Base Current	I_B		500		mA
Power Dissipation	P_D		200		W
Operating and Storage Junction Temperature	T_J, T_{stg}		-65 to +200		°C
Thermal Resistance	Θ_{JC}		0.875		°C/W

ELECTRICAL CHARACTERISTICS: (T_C=25°C unless otherwise noted)

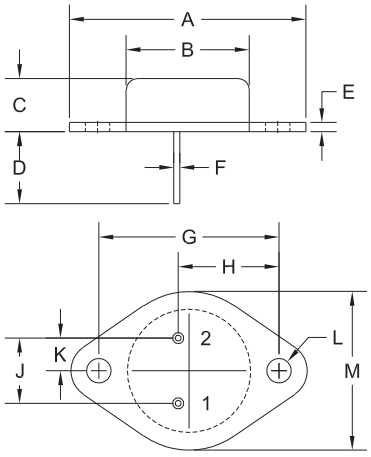
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CER}	V_{CE}=Rated V_{CEO}, R_{BE}=1.0kΩ		1.0	mA
I_{CER}	V_{CE}=Rated V_{CEO}, R_{BE}=1.0kΩ, T_C=150°C		5.0	mA
I_{EBO}	V_{EB}=5.0V		2.0	mA
BV_{CEO}	I_C=100mA (PMD16K60, 17K60)	60		V
BV_{CEO}	I_C=100mA (PMD16K80, 17K80)	80		V
BV_{CEO}	I_C=100mA (PMD16K100, 17K100)	100		V
$V_{CE(SAT)}$	I_C=10A, I_B=40mA		2.0	V
$V_{BE(SAT)}$	I_C=10A, I_B=40mA		2.8	V
$V_{BE(ON)}$	V_{CE}=3.0V, I_C=10A		2.8	V
h_{FE}	V_{CE}=3.0V, I_C=10A (PMD16K series)	1.0K	20K	
h_{FE}	V_{CE}=3.0V, I_C=10A (PMD17K series)	800	20K	
h_{fe}	V_{CE}=3.0V, I_C=7.0A, f=1.0kHz	300		
f_T	V_{CE}=3.0V, I_C=7.0A, f=1.0MHz	4.0		MHz
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz		400	pF

R1 (26-November 2012)

PMD16K SERIES NPN
PMD17K SERIES PNP

COMPLEMENTARY SILICON DARLINGTON POWER TRANSISTORS

TO-3 CASE - MECHANICAL OUTLINE



R2

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	MIN	MAX	MIN	MAX
A	1.516	1.573	38.50	39.96
B (DIA)	0.748	0.875	19.00	22.23
C	0.250	0.450	6.35	11.43
D	0.433	0.516	11.00	13.10
E	0.054	0.065	1.38	1.65
F	0.035	0.045	0.90	1.15
G	1.177	1.197	29.90	30.40
H	0.650	0.681	16.50	17.30
J	0.420	0.440	10.67	11.18
K	0.205	0.225	5.21	5.72
L (DIA)	0.151	0.172	3.84	4.36
M	0.984	1.050	25.00	26.67

TO-3 (REV: R2)

LEAD CODE:
1) Base
2) Emitter
Case) Collector

MARKING:
FULL PART NUMBER

R1 (26-November 2012)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES

PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centralsemi.com

Worldwide Field Representatives:
www.centralsemi.com/wwreps

Worldwide Distributors:
www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centralsemi.com/terms