### CSHD10-45L

# SURFACE MOUNT SILICON POWER SCHOTTKY RECTIFIER 10 AMP, 45 VOLT



www.centralsemi.com

# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CSHD10-45L is a silicon power Schottky rectifier designed for power applications requiring a low forward voltage drop.





 $\textbf{MAXIMUM RATINGS:} \ (T_{\hbox{\scriptsize C}} = 25 ^{\circ} \hbox{\scriptsize C unless otherwise noted})$ 

	SYMBOL		UNITS
Peak Repetitive Reverse Voltage	$V_{RRM}$	45	V
Average Rectified Forward Current (T <sub>C</sub> =120°C)	IO	10	Α
Peak Forward Surge Current, tp=10ms	IFSM	200	Α
Peak Repetitive Reverse Surge Current, tp=2.0µs	I <sub>RRM</sub>	1.0	Α
Critical Rate of Rise of Reverse Voltage	dv/dt	10,000	V/µs
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	ΘJC	3.5	°C/W

**ELECTRICAL CHARACTERISTICS:**  $(T_C=25^{\circ}C \text{ unless otherwise noted})$ 

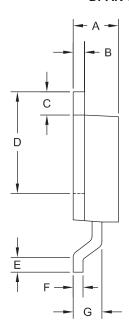
SYMBOL	TEST CONDITIONS	TYP	MAX	UNITS
$I_R$	V <sub>R</sub> =45V	40	100	μΑ
$I_{R}$	V <sub>R</sub> =45V, T <sub>C</sub> =125°C		15	mA
$V_{F}$	I <sub>F</sub> =10A	0.575	0.75	V
$V_{F}$	I <sub>F</sub> =10A, T <sub>C</sub> =125°C		0.55	V

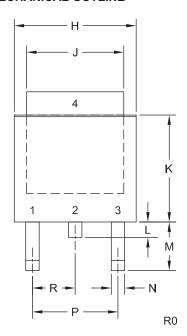
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# **DPAK CASE - MECHANICAL OUTLINE**



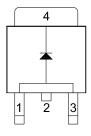


# LEAD CODE:

- 1) Anode
- 2) Cathode 3) Anode
- 4) Cathode

Pin 2 is common to the tab (4)

### MARKING: FULL PART NUMBER



DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.083	0.108	2.10	2.75			
В	0.016	0.032	0.40	0.81			
С	0.035	0.063	0.89	1.60			
D	0.203	0.228	5.15	5.79			
E	0.020	-	0.51	-			
F	0.018	0.024	0.45	0.60			
G	0.051	0.071	1.30	1.80			
Н	0.248	0.268	6.30	6.81			
J	0.197	0.217	5.00	5.50			
K	0.209	0.245	5.30	6.22			
L	0.025	0.040	0.64	1.02			
M	0.090	0.115	2.30	2.91			
N	0.012	0.045	0.30	1.14			
Р	0.180		4.60				
R	0.090		2.30				
DPAK (REV: R0)							

R7 (21-January 2013)

### **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 guick ship samples (2<sup>nd</sup> 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**

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