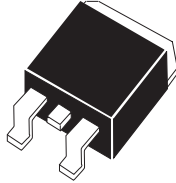


CSHDD16-40C  
 CSHDD16-60C  
 CSHDD16-100C

**SURFACE MOUNT  
 SILICON SCHOTTKY RECTIFIERS  
 DUAL, COMMON CATHODE  
 16 AMP, 40 THRU 100 VOLTS**

**D<sup>2</sup>PAK!  
 SUPER POWER**



**D<sup>2</sup>PAK CASE**

**Central™  
 Semiconductor Corp.**

**FEATURES:**

- HIGH RELIABILITY
- HIGH CURRENT CAPABILITY
- UL FLAMMABILITY CLASSIFICATION 94V-0
- LOW POWER LOSS, HIGH EFFICIENCY
- LOW FORWARD VOLTAGE
- HIGH SURGE CAPACITY
- SUPERIOR LOT TO LOT CONSISTENCY
- HIGH VOLTAGE

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CSHDD16-40C Series types are Silicon Schottky Rectifiers designed for surface mount fast switching applications requiring a low forward voltage drop. To order devices on 24mm Tape and Reel ( 800/13" Reel ), add TR13 suffix to part number.

**MARKING CODE: FULL PART NUMBER**

**MAXIMUM RATINGS:** (T<sub>C</sub>=25°C unless otherwise noted)

	SYMBOL	CSHDD16	CSHDD16	CSHDD16	UNITS
		<u>-40C</u>	<u>-60C</u>	<u>-100C</u>	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	40	60	100	V
DC Blocking Voltage	V <sub>R</sub>	40	60	100	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	26	42	80	V
Average Forward Current (T <sub>C</sub> =90°C)	I <sub>O</sub>		16		A
Peak Forward Surge Current (8.3ms)	I <sub>FSM</sub>		150		A
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
Typical Thermal Resistance	θ <sub>JC</sub>		2.0		°C/W
Typical Thermal Resistance	θ <sub>JA</sub>		50		°C/W

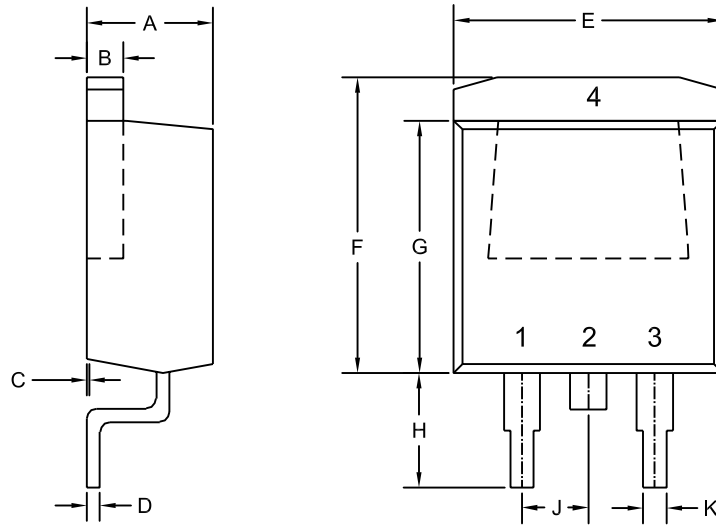
**ELECTRICAL CHARACTERISTICS PER DIODE:** (T<sub>C</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	CSHDD16		CSHDD16		CSHDD16		UNITS
		<u>-40C</u>		<u>-60C</u>		<u>-100C</u>		
		TYP	MAX	TYP	MAX	TYP	MAX	
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub>		100		100		100	μA
I <sub>R</sub>	V <sub>R</sub> =Rated V <sub>RRM</sub> , T <sub>C</sub> = 125°C		15		15		15	mA
V <sub>F</sub>	I <sub>F</sub> =8.0A		0.65		0.75		0.85	V
V <sub>F</sub>	I <sub>F</sub> =8.0A, T <sub>C</sub> = 125°C		0.57		0.65		0.75	V
V <sub>F</sub>	I <sub>F</sub> =16A		0.84		0.95		1.10	V
V <sub>F</sub>	I <sub>F</sub> =16A, T <sub>C</sub> = 125°C		0.72		0.85		1.00	V
C <sub>J</sub>	V <sub>R</sub> =4.0V, f=1.0MHz	300		300		300		pF

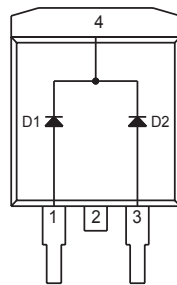
R3 (16-June 2004)

**SURFACE MOUNT  
SILICON SCHOTTKY RECTIFIERS  
DUAL, COMMON CATHODE  
16 AMP, 40 THRU 100 VOLTS**

**D<sup>2</sup>PAK CASE - MECHANICAL OUTLINE**



R2



- LEAD CODE:**  
 1) ANODE D1  
 2) CATHODE D1,D2  
 3) ANODE D2  
 4) CATHODE D1,D2

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.163	0.189	4.14	4.80
B	0.045	0.055	1.14	1.40
C	0.000	0.010	0.00	0.25
D	0.012	0.028	0.30	0.70
E	0.386	0.409	9.80	10.40
F	0.378	0.417	9.60	10.60
G	0.335	0.358	8.50	9.10
H	0.197	0.236	5.00	6.00
J	0.093	0.108	2.35	2.75
K	0.030	0.035	0.75	0.90

D2PAK (REV: R2)

PIN 2 IS COMMON TO THE TAB(4)

**MARKING CODE: FULL PART NUMBER**

R3 (16-June 2004)