6 Lake Street, Lawrence, MA 01841
1-800-446-1158 / (978) 620-2600 / Fax: (978) 689-0803
Website: http://www.microsemi.com

Gort Road Business Park, Ennis, Co. Clare, Ireland
Tel: +353 (0) 65 6840044 Fax: +353 (0) 65 6822298

TECHNICAL DATA SHEET

GENERAL PURPOSE SILICONE DIODE

– ALL JUNCTIONS COMPLETELY PROTECTED WITH SILICON DIOXIDE
– COMPATIBLE WITH ALL WIRE BONDING AND DIE ATTACH TECHNIQUES EXCEPT SOLDER REFLOW

DEVICES

CD483B	**CD645**	**CD5194**
CD485B	**CD647**	**CD5195**
CD486B	**CD649**	**CD5196**

MAXIMUM RATING AT 25°C

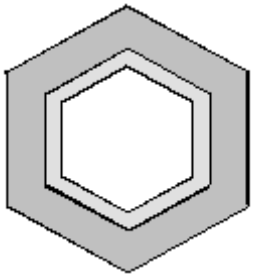
Operating Temperature: -65°C to +175°C
Storage Temperature: -65°C to +175°C

ELECTRICAL CHARACTERISTICS ***(T_A = 25°C, unless otherwise specified)***

TYPE NUMBER	VRWM	MAXIMUM FORWARD VOLTAGE	IFSM T_p = 1/120 S T_A = +25°C	MAXIMUM REVERSE LEAKAGE CURRENT @ +25°C		MAXIMUM CAPACITANCE @ V_R = 4 VOLTS f = 1.0MHz
	V_{BR} @ 50uA	V_F @ 100mA		I_R @ V_R		C_T
	VOLTS	VOLTS	A	nA	VOLTS	PICO FARADS
CD483B	80	0.8 – 1.0	2	25	70	-
CD485B	200	0.8 – 1.0	2	25	180	-
CD486B	250	0.8 – 1.0	2	25	225	-
CD645	270	0.8 – 1.0(1)	5	50	225	20
CD647	480	0.8 – 1.0(1)	5	50	400	20
CD649	720	0.8 – 1.0(1)	5	50	600	20
CD5194	80	0.8 – 1.0	2	25	80	-
CD5195	200	0.8 – 1.0	2	25	200	-
CD5196	250	0.8 – 1.0	2	25	225	-

NOTE: (1) Performed at 400mA pulsed.

TYPE NUMBER	I_O	I_O T_A = + 150°C	V_F @ 400mA	MAXIMUM REVERSE LEAKAGE CURRENT @T_A = +150°C		MAXIMUM FORWARD VOLTAGE @ -55°C	
			T_A = +150°C	I_R @ V_R		V_F @ I_F	
	mA	mA	V	uA	nA	VOLTS	mA
CD483B	200	50	-	5	25	1.2	100
CD485B	200	50	-	5	25	1.2	100
CD486B	200	50	-	5	25	1.2	100
CD645	400	150	0.7 – 0.95	50	50	1.2	400
CD647	400	150	0.7 – 0.95	50	50	1.2	400
CD649	400	150	0.7 – 0.95	50	50	1.2	400
CD5194	200	50	-	5	25	1.2	100
CD5195	200	50	-	5	25	1.2	100
CD5196	200	50	-	5	25	1.2	100



27 MILS HEX, FLAT To FLAT

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TECHNICAL DATA SHEET

DIE DIMENSIONS

DESIGN DATA

METALIZATION
Top: (Cathode)….Au
Bottom: (Anode)..Al

AL Thickness...25,000A Min
Gold Thickness …4,000A Min

CHIP THICKNESS …10 Mils

Tolerances: All

Dimensions +/- 2 mils

