

#### **Features**

- Low Reverse Stand.Off Voltage
- Low Leakage Current
- · For Space Saving Application
- · Fast Response, Response Time Less than 1ns
- · Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- · Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 1250°C/W Junction to Ambient

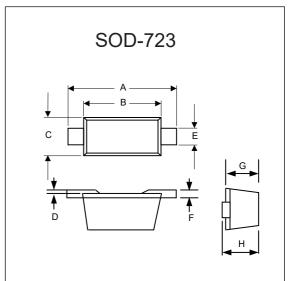
MCC Part Number	Device Marking
ESDLC5V0D7B	Н

IEC61000-4-2(ESD)	Air Contact	±30KV ±30KV
JESD22-A114-B(ESD)	Machine Human Body	±0.4KV ±16KV
Power Dissipation	$P_{D}$	100mW

### **Internal Structure**



# ESD Protection Device

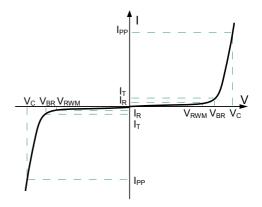


DIMENSIONS					
DIM INCH		HES	MM		NOTE
DIIVI	MIN	MAX	MIN	MAX	NOTE
Α	0.051	0.059	1.30	1.50	
В	0.035	0.043	0.90	1.10	
С	0.022	0.026	0.55	0.65	
D	0.001	0.003	0.01	0.07	
Е	0.010	0.014	0.25	0.35	
F	0.003	0.006	0.08	0.15	
G	0.020	0.023	0.52	0.58	
Н	0.021	0.026	0.53	0.65	



## **ELECTRICAL CHARACTERISTICS** (T<sub>A</sub> = 25°C unless otherwise noted)

Symbol	Parameter
I <sub>PP</sub>	Maximum Reverse Peak Pulse Current
V <sub>C</sub>	Clamping Voltage @ I <sub>PP</sub>
$V_{RWM}$	Working Peak Reverse Voltage
I <sub>R</sub>	Maximum Reverse Leakage Current @ V <sub>RWM</sub>
$V_{BR}$	Breakdown Voltage @ I <sub>⊺</sub>
I <sub>T</sub>	Test Current
С	Capacitance @V <sub>R</sub> =0 and f =1MHz

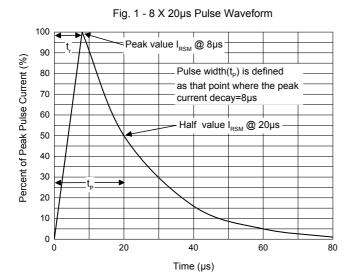


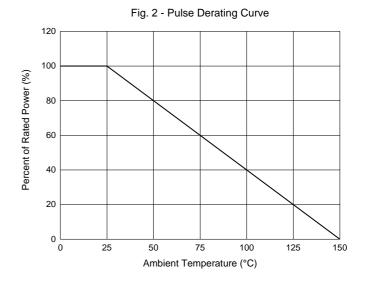
## Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Тур.	Max.	Units
Reverse Working Voltage	$V_{RWM}$				5	V
Reverse Breakdown Voltage	$V_{BR}$	$I_T = 1mA$	5.8		7.8	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>RWM</sub> =5V			0.1	μΑ
Clamping Voltage	V <sub>C</sub>	I <sub>PP</sub> =5A, t <sub>P</sub> =8/20μs			12.5	V
Junction Capacitance	CJ	$V_R = 0V$ , $f = 1MHz$		12		pF



## **Curve Characteristics**







## **Ordering Information**

Device	Packing
Part Number-TP	Tape&Reel: 8Kpcs/Reel

Note: Adding "-HF" Suffix for Halogen Free, eg. Part Number-TP-HF

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Rev.3-1-01012019 4/4 MCCSEMI.COM