



Micro Commercial Components



Micro Commercial Components
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SD05

5.0Volts ESD Protection Devices

Features

- Halogen free available upon request by adding suffix "-HF"
- For sensitive ESD protection
- Low clamping voltage
- Low leakage
- Protects one power or I/O port
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction : -55°C to +125°C
- Storage Temperature: -55°C to +150°C

Parameter	Symbol	Limits	unit
IEC61000-4-2(ESD) Air Contact		±30 ±30	KV
IEC 61000-4-5 (8/20us)	I _{PP}	40	A
Peak Power Dissipation (8/20us)	P _{pk}	500	W

Marking:5U/305

SOD323

DIMENSIONS					NOTE
DIM	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

**SUGGESTED SOLDER
PAD LAYOUT**

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise specified)

SD05						
Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Working Voltage	V_{RWM}			5	V	
Breakdown Voltage	V_{BR}	6			V	$I_T = 1\text{mA}$
Reverse Leakage Current	I_R			1	μA	$V_{RWM} = 5\text{V}$
Forward Voltage	V_F		0.8	1.2	V	$I_F = 10\text{mA}$
Clamping Voltage	V_C			9.5	V	$I_{PP} = 5\text{A}$ (8 x 20 μs pulse)
Clamping Voltage	V_C			12.5	V	$I_{PP} = 40\text{A}$ (8 x 20 μs pulse)
Peak Pulse Current	I_{pp}			40	A	$t_p = 8/20\mu\text{s}$
Junction Capacitance	C_J			350	pF	$V_R = 0\text{V}$, $f = 1\text{MHz}$



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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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