



Micro Commercial Components



Micro Commercial Components
20736 Marilla Street Chatsworth
CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

ESDU5V0M5

5 Volts
ESD Protection
Device

Features

- Halogen free available upon request by adding suffix "-HF"
Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
Epoxy meets UL 94 V-0 flammability rating
Moisture Sensitivity Level 1
Low reverse claming voltage
Low leakage current
Low capacitance: 0.8pF max.
Low reverse stand-off voltage:5V

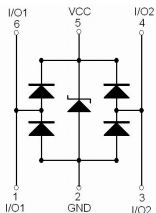
Maximum Ratings

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

Table with 4 columns: Parameter, Symbol, Limits, unit. Rows include IEC61000-4-2ESD Voltage, JESD22-A114-B ESD Voltage, Peak Pulse Power, and Peak Pulse Current.

- (1).Device stressed with ten non-repetitive ESD pulses.
(2).Non-repetitive current pulse 8/20µs exponential decay waveform according to IEC61000-4-5.

PinConfiguration



Marking: U5N2

SOT-563

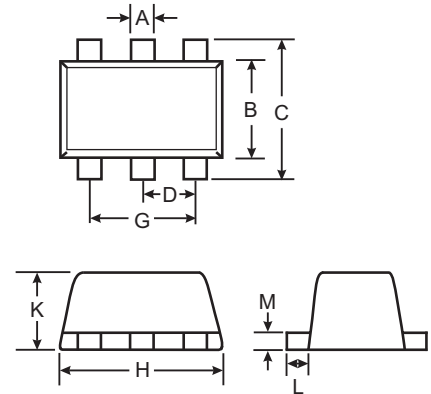
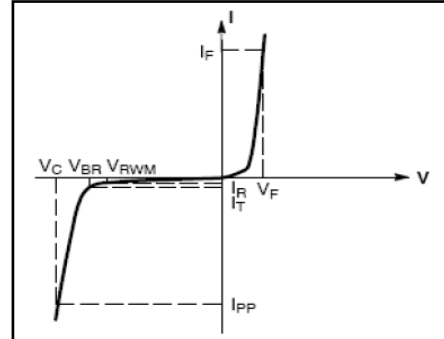


Table with 6 columns: DIM, INCHES (MIN, M), M (MIN, MAX), NOTE. Lists dimensions A through M.

ELECTRICAL PARAMETER

Symbol	Parameter
V_C	Clamping Voltage @ I_{PP}
I_{PP}	Peak Pulse Current
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_R	Reverse Leakage Current @ V_{RWM}
V_{RWM}	Reverse Standoff Voltage
V_F	Forward Voltage @ I_F
I_F	Forward Current



ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

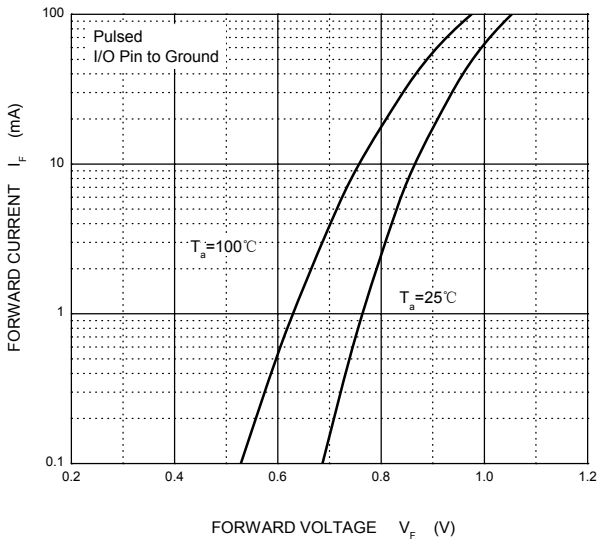
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Per channel(I/O to GND unless otherwise specified)						
Reverse stand off voltage	$V_{RWM}^{(1)}$				5	V
Breakdown voltage	$V_{(BR)}$	$I_T=1\text{mA}$	6.0		10	V
		$I_T=1\text{mA}$ V_{CC} to GND	5.0		12	V
Reverse leakage current	I_R	$V_{RWM}=5\text{V}$ (I/O to GND & V_{CC} to GND)			1	μA
Forward voltage	V_F	$I_F=10\text{mA}$ (I/O to GND & V_{CC} to GND)	0.4		1.5	V
Clamping voltage	$V_C^{(2)}$	$I_{PP}=1\text{A}$ (I/O to GND & V_{CC} to GND)			13	V
		$I_{PP}=3.5\text{A}$ (I/O to GND & V_{CC} to GND)			25	V
Junction capacitance	C_J	$V_R=0\text{V}, f=1\text{MHz}$			0.8	pF
		$V_R=0\text{V}, f=1\text{MHz}$, I/O to I/O			0.4	pF

(1).Other voltages available upon request.

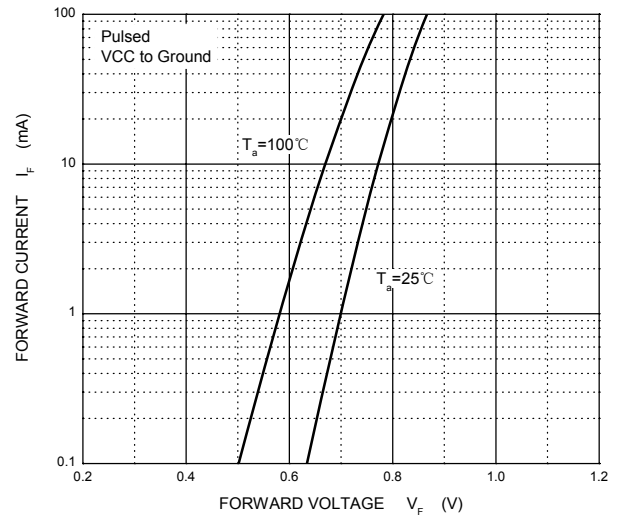
(2).Non-repetitive current pulse 8/20 μs exponential decay waveform according to IEC61000-4-5

TYPICAL CHARACTERISTICS

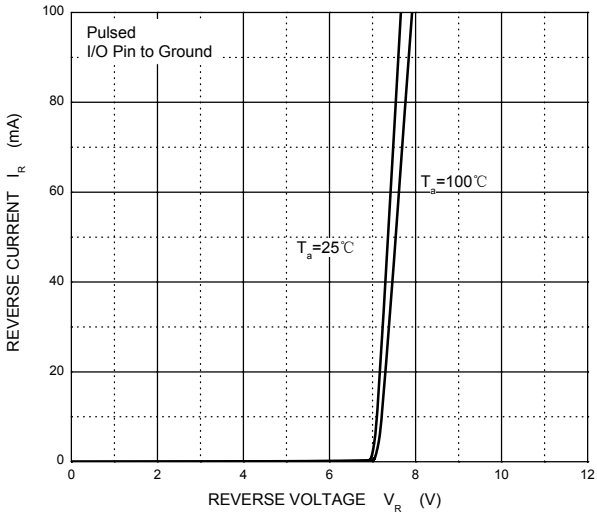
Forward Characteristics



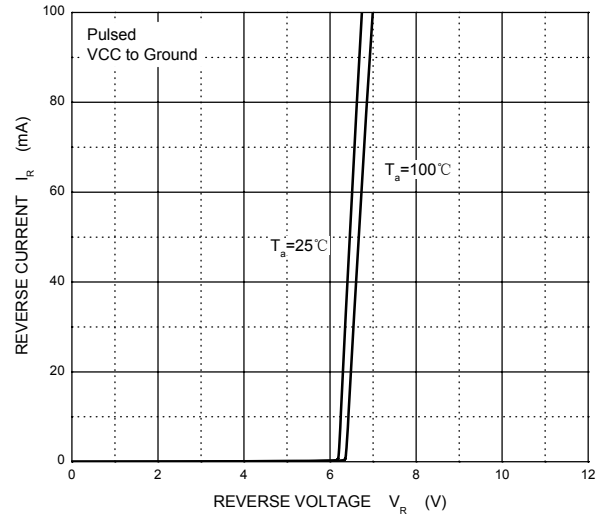
Forward Characteristics



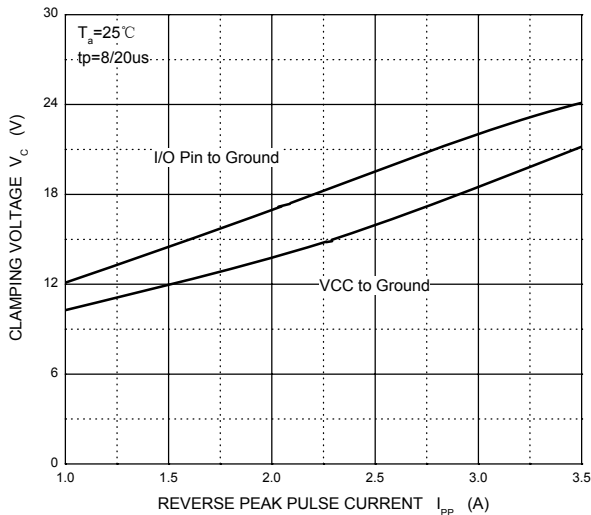
Reverse Characteristics



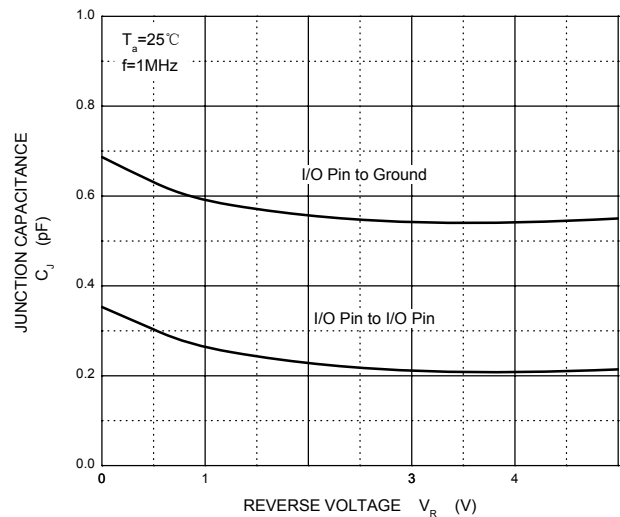
Reverse Characteristics



V_C — I_{PP}



Capacitance Characteristics





Micro Commercial Components

Ordering Information :

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

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

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . Micro Commercial Components Corp . does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold Micro Commercial Components Corp . and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.