UMW ESD05V52D

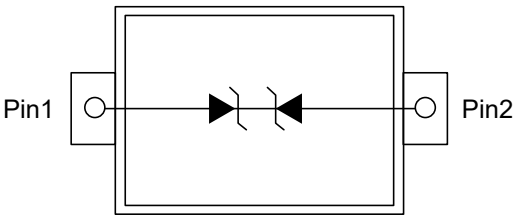
1.Applications

- Cellular phones
- Portable devices
- Digital cameras
- Power supplies

2.Features

- Small Body Outline Dimensions
- Low Body Height
- Peak Power up to 200 Watts @ 8 x 20_s Pulse
- Low Leakage current
- Response Time is Typically < 1 ns
- ESD Rating of Class 3 (> 16 kV) per Human Body Model

3.Pinning information



SOD-523

4.Absolute Ratings (T_{amb}=25°C)

Parameter	Symbol	Value	Units
Peak Pulse Power (t_p=8/20μs)	P_{PP}	200	W
Maximum lead temperature for soldering during 10s	T_L	260	°C
Storage Temperature Range	T_{STG}	-55 to 155	°C
Junction Temperature	T_{OP}	-40 to 125	°C
Maximum junction temperature	T_J	150	°C
IEC61000-4-2 (ESD) air discharge		±15	kV
IEC61000-4-2 (ESD) contact discharge		±8	kV
IEC61000-4-4(EFT)		40	A
ESD Voltage Per Human Body Model		16	kV

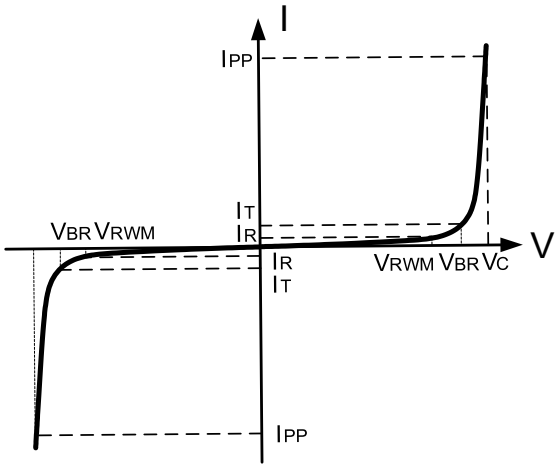
5.Electrical Characteristic (T_A=25°C unless otherwise noted)

Device	Device Marking	V_{RWM} (V)	I_R(uA) @ V_{RWM}	V_{BR} (V)@ I_T (Note 1)		I_T	V_C (V) @I_{PP}=5A*	V_C (V) @Max I_{PP}*	I_{PP} (A)*	P_{PK} (W)*	C (pF)
		Max	Max	Min	Max	mA	Typ	Max	Max	Max	Typ
ESD05V52D-C	5C	5.0	1.0	5.6	7.8	1.0	11.6	18.6	9.4	174	25

Notes:

1. VBR is measured with a pluse test current IT at an ambient temperature of 25°C.

6.Electrical Parameters (T_A=25°C unless otherwise noted)



Symbol	Parameter
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
V_{RWM}	Working Peak Reverse Voltage
I_R	Maximum Reverse Leakage Current @ V_{RWM}
I_T	Test Current
V_{BR}	Breakdown Voltage @ I_T

7.Typical characteristic

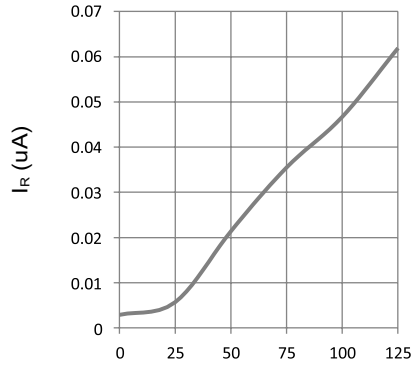


Figure 1: Reverese character

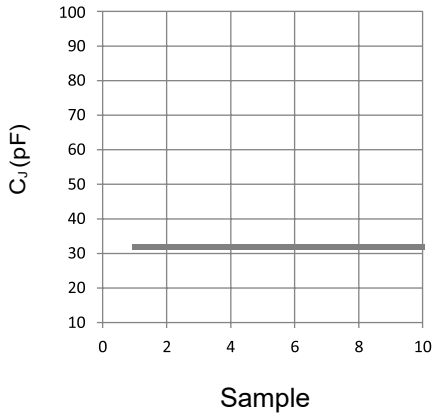
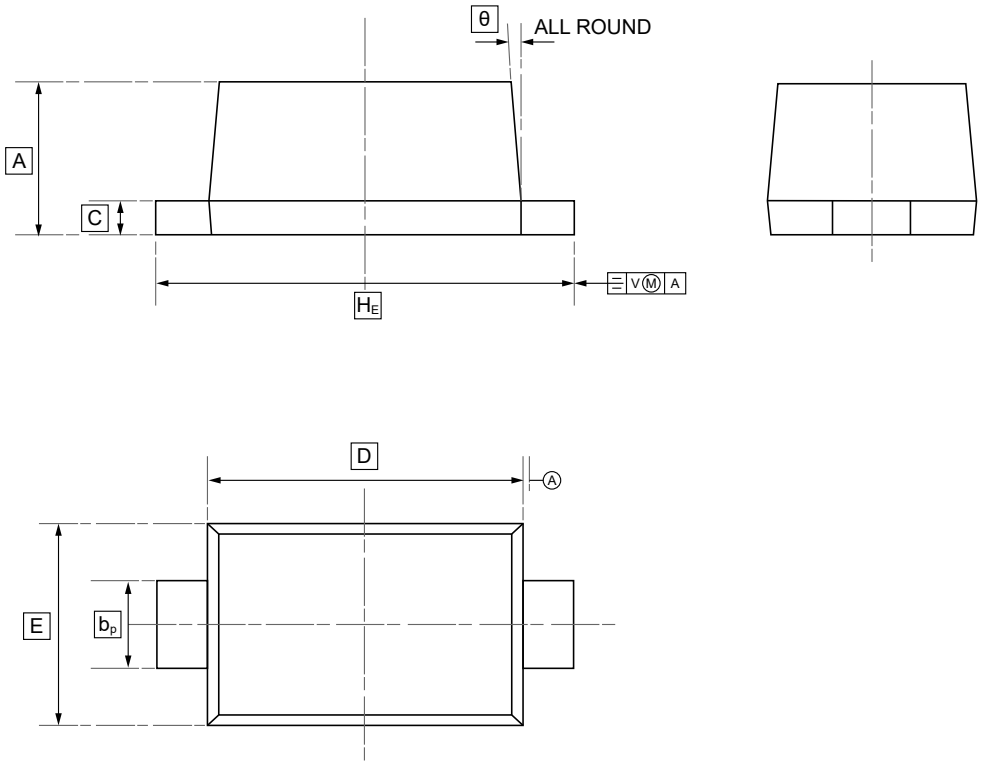


Figure 2: Capacitance character

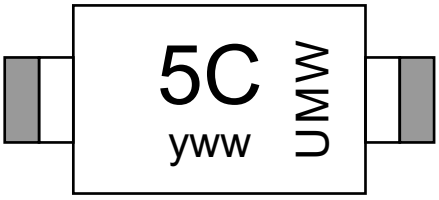
8.SOD-523 Package Outline Dimensions



DIMENSIONS (mm are the original dimensions)

Symbol	A	b_p	C	D	E	H_E	θ
Min	0.58	0.3	0.100	1.15	0.75	1.5	5°
Max	0.68	0.4	0.135	1.25	0.85	1.7	

9.Ordering information



yww: Batch Code

Order Code	Package	Base QTY	Delivery Mode
UMW ESD05V52D	SOD-523	3000	Tape and reel

10.Disclaimer

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