Features

Uni-directional ESD protection of two lines

60Watts peak pulse power (tp = 8/20μs)

Working voltage:5V

Junction Capacitance: 0.6pF(Typ)

Low clamping voltage

Low leakage current

IEC 61000-4-2 ±15kV contact ±8kV air

IEC 61000-4-5 (Lightning) 4A (8/20μs)

Applications

Portable electronics

Control & monitoring systems

Servers, notebooks, and desktop PCs

Set-top box

Communication systems

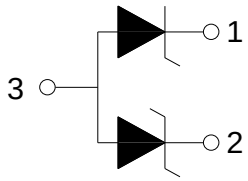
Mechanical Data

Package:SOT-323

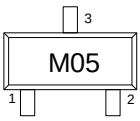
Molding compound flammability rating: UL 94V-0

RoHS/WEEE Compliant

Schematic & PIN Configuration



Ordering Information

Part Number	Package	Marking	Packing	Reel Size
HSP051-2W3Y-CN	SOT-323		3000 Tape & Reel	7 inches

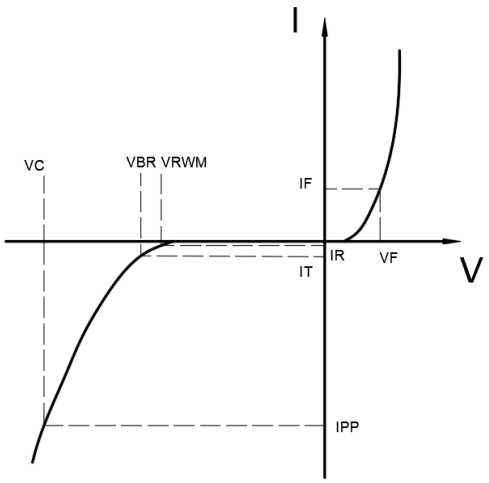
Absolute Maximum Rating(T_A=25°C unless otherwise Specified)

Parameters	Symbol	Min.	Max.	Unit
Peak pulse power (tp=8/20us)@25℃	P_{pk}	-	60	W
Peak pulse current (tp=8/20us)@25℃	I_{PP}		4	A
ESD (IEC61000-4-2 air discharge) @25℃	V_{ESD}	-	±15	kV
ESD (IEC61000-4-2 contact discharge) @25℃	V_{ESD}	-	±8	kV
Junction temperature	T_J	-	150	℃
Operating temperature	T_{OP}	-40	125	℃
Storage temperature	T_{STG}	-55	150	℃
Lead temperature	T_L	-	260	℃

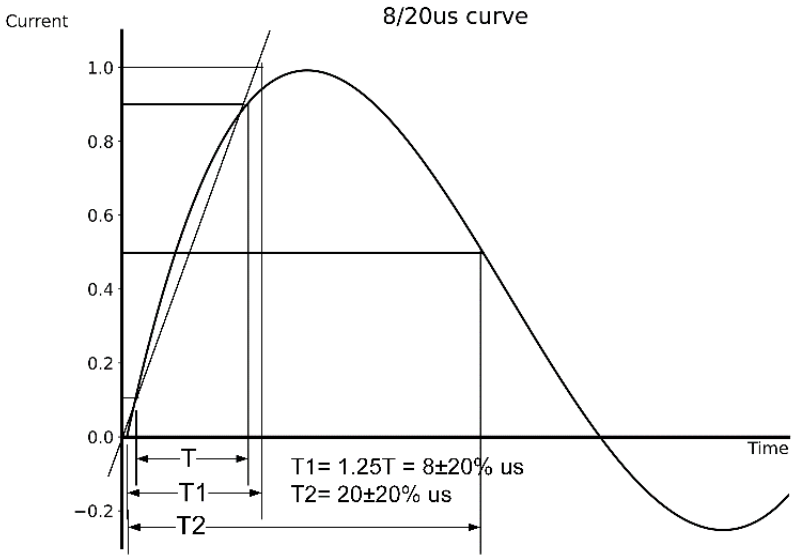
Electrical Characteristics(T_A=25°C unless otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Stand-off Voltage	VRWM				5	V
Reverse Breakdown Voltage	V_{BR}	IT=1mA	6			V
Reverse Leakage Current	IR	VRWM=5V			1	uA
Clamping Voltage	VC	IPP=1A; tp=8/20us		10		V
Clamping Voltage	VC	IPP=4A; tp=8/20us		15		V
Junction Capacitance	CJ	VR=0V; f=1MHz		0.6		pF

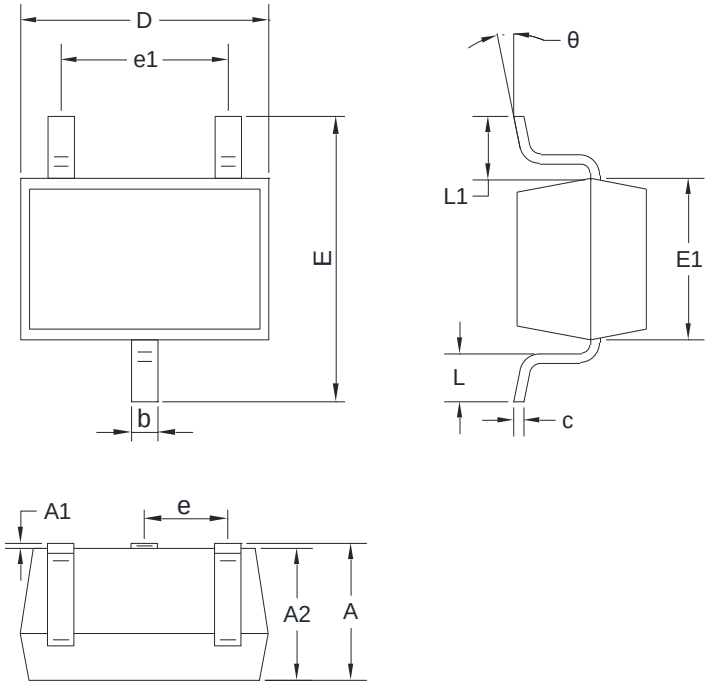
Symbol	Parameters
V_{RWM}	Peak Reverse Working Voltage
I_R	Reverse Leakage Current @ V_{RWM}
V_{BR}	Breakdown Voltage @ I_T
I_T	Test Current
I_{PP}	Maximum Reverse Peak Pulse Current
V_C	Clamping Voltage @ I_{PP}
I_F	Forward Current
V_F	Forward Voltage @ I_F



Typical Characteristics(T_A=25°C unless otherwise Specified)



Outline Drawing – SOT-323



Symbol	Millimeters		Symbol	Millimeters	
	Min	Max		Min	Max
A	0.90	1.10	E1	1.15	1.35
A1	0.00	0.10	e	0.65 TYP	
A2	0.90	1.00	e1	1.20	1.40
b	0.20	0.40	L	0.26	0.46
c	0.08	0.15	L1	0.525 REF	
D	2.00	2.20	θ	0°	8°
E	2.15	2.45			

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