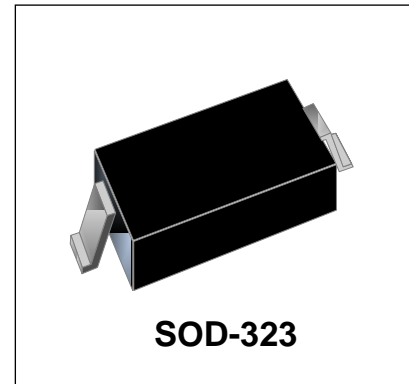




Features

- IGBT 封装 (Vce = 80V, Icm = 8/20μs)
- 适用于 100V 以下电压应用
- 适用于 10A 以下电流应用
- 适用于 100V 以下电压应用
- 适用于 10A 以下电流应用



SOD-323

IEC Compatibility (EN61000-4)

- IEC 61000-4-2 (ESD) ±30kV (air), ±30kV (contact)
- IEC 61000-4-4 (EFT) 40A (5/50ns)
- IEC 61000-4-5 (Lightning) 6A (8/20μs)

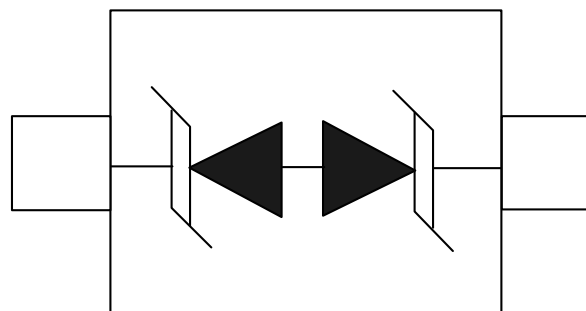
Mechanical Characteristics

- 符合 JEDEC 封装标准
- 符合 IPC 封装标准
- 符合 IPC 封装标准
- 符合 IPC 封装标准

Applications

- 适用于 100V 以下电压应用
- 适用于 10A 以下电流应用
- 适用于 100V 以下电压应用
- 适用于 10A 以下电流应用

Schematic & PIN Configuration

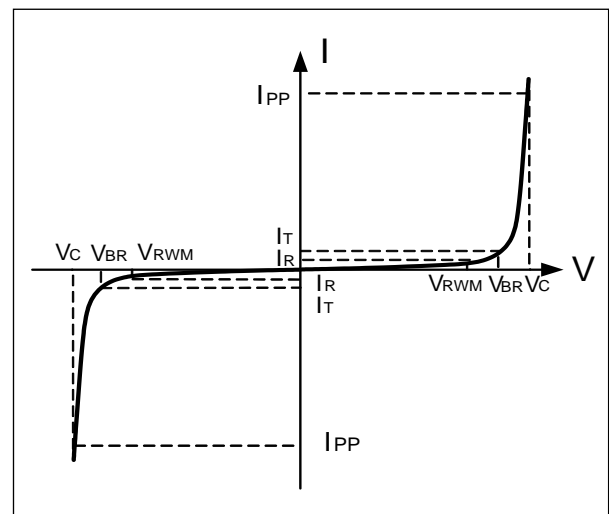


SOD-323 (Top View)

Absolute Maximum Rating			
Rating	Symbol	Value	Units
Peak Pulse Power ($t_p = 8/20\mu s$)	P_{PP}	420	W
Peak Pulse Current ($t_p = 8/20\mu s$)	I_{PP}	6	A
Operating Temperature	T_J	-55 to + 125	°C
Storage Temperature	T_{STG}	-55 to +150	°C

Electrical Parameters (T=25°C)

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



Electrical Characteristics

DW36D-BH-AT-S						
Parameter	Symbol	Conditions	Minimum	Typical	Maximum	Units
Reverse Stand-Off Voltage	V_{RWM}				36	V
Reverse Breakdown Voltage	V_{BR}	$I_T = 1mA$	38			V
Reverse Leakage Current	I_R	$V_{RWM} = 36V, T = 25^\circ C$			500	nA
Maximum Clamping Voltage	V_C	$I_{PP} = 6A, t_p = 8/20\mu s$		64.8	70	V
ESD Clamping Voltage ¹	V_C	$I_{PP} = 4A$ $t_p = 0.2/100ns$		50.3		V
ESD Clamping Voltage ¹	V_C	$I_{PP} = 16A$ $t_p = 0.2/100ns$		51.2		V
Dynamic Resistance ^{1,2}	R_{DYN}	TLP=0.2/100ns		0.08		Ω
Junction Capacitance	C_j	$V_R = 0V, f = 1MHz$		15	20	pF

Note: 1、TLP Setting : $t_p = 100ns, t_r = 0.2ns, I_{TLP}$ and V_{TLP} sample window: $t_1 = 70ns$ to $t_2 = 90ns$.
 2、Dynamic resistance calculated from $I_{PP} = 4A$ to $I_{PP} = 16A$ using "Best Fit".

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Typical Characteristics

Figure 1: Peak Pulse Power vs. Pulse Time

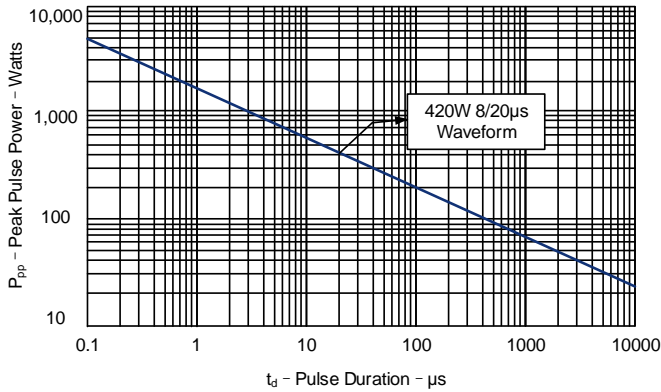


Figure 2: Power Derating Curve

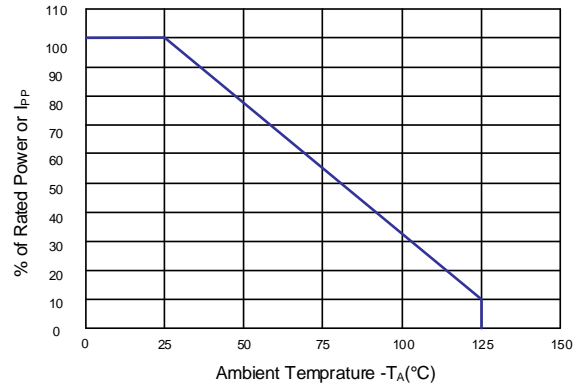


Figure 3: Clamping Voltage vs. Peak Pulse Current

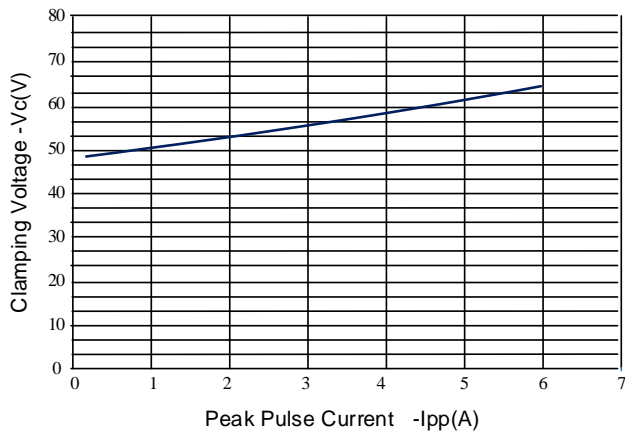


Figure 4: Normalized Junction Capacitance vs. Reverse Voltage

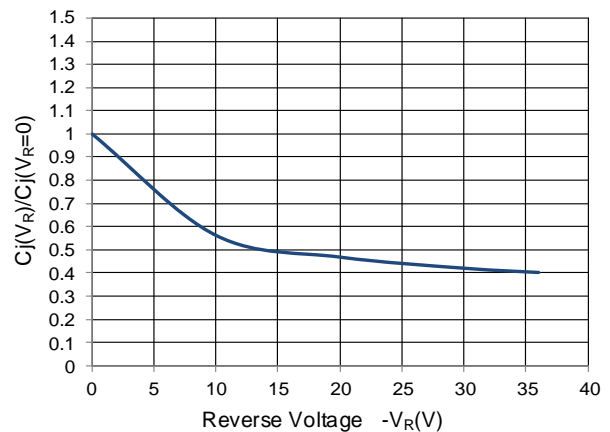


Figure 5: TLP Positive I-V Curve

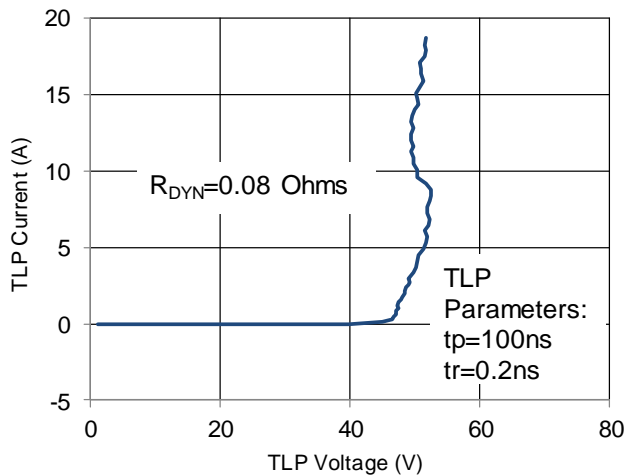
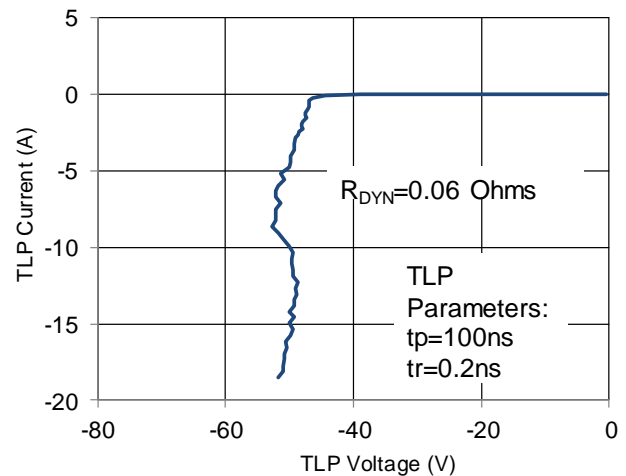


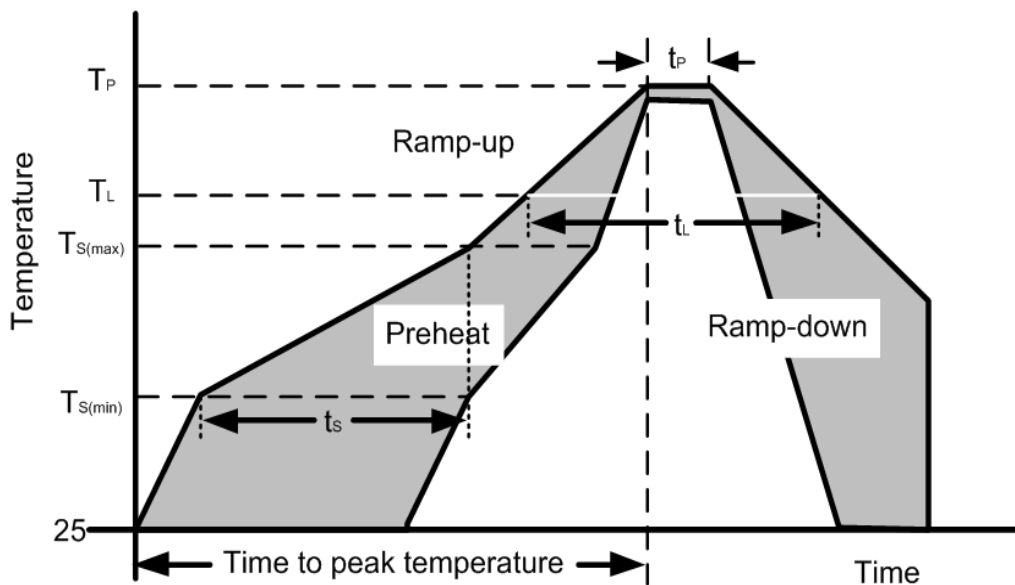
Figure 6: TLP Negative I-V Curve



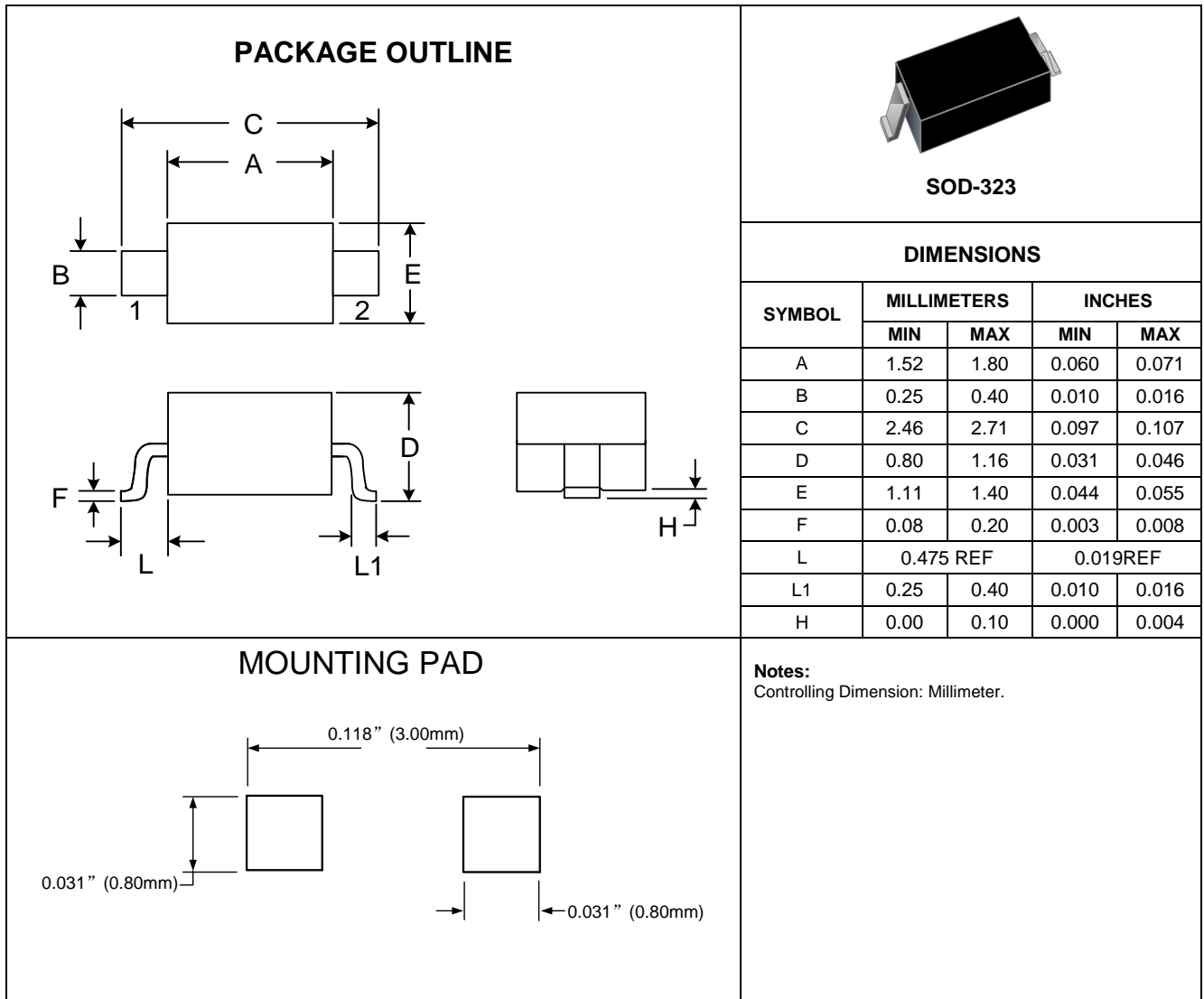


Soldering Parameters

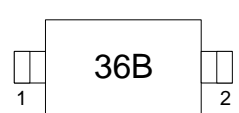
Reflow Condition		Pb – Free assembly
Pre Heat	Temperature Min ($T_{S(min)}$)	150°C
	Temperature Max ($T_{S(max)}$)	200°C
	Time (min to max) (t_s)	60 – 190 secs
Average ramp up rate (Liquidus Temp) (T_L) to peak		5°C/second max
$T_{S(max)}$ to T_L —Ramp-up Rate		5°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Temperature (t_L)	60 – 150 seconds
Peak Temperature (T_P)		260+0/-5 °C
Time within actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		5°C/second max
Time 25°C to peak Temperature (T_P)		8 minutes Max.
Do not exceed		280°C



Outline Drawing – SOD-323



Marking Codes

Part Number	Marking Code
DW36D-BH-AT-S	

Package Information

Qty: 3k/Reel