

DO-15 TVS 瞬态电压抑制二极管

■Features 特点

Excellent Clamping Capability 优秀的钳位能力

Low Zener Impedance 低稳压阻抗

Fast Response Time 快速反应时间

■Applications 应用

Clamping Voltage 钳制电压

■Internal Schematic Diagram 内部结构



■Absolute Maximum Ratings 最大额定值

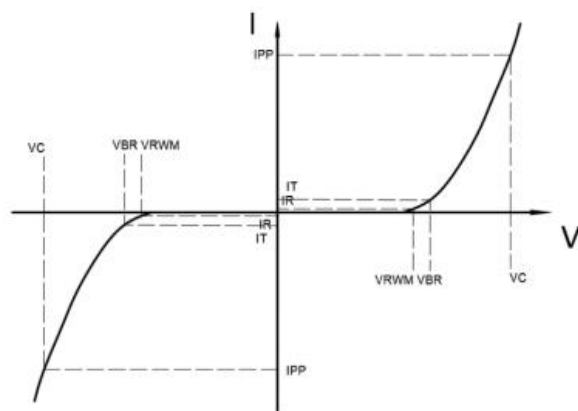
Characteristic 特性参数	Symbol 符号	Rat 额定值	Unit 单位
Peak Power Dissipation 峰值功率	P_{PK}	600	W
Peak Forward Surge Current 峰值浪涌电流	I_{PP}	100	A
Power Dissipation 耗散功率	P_D	5	W
Lead Temperature 管脚温度	T_L	260	°C
Operating Temperature 工作温度	T_{op}	-40~125	°C
Thermal Resistance J-A 结到环境热阻	$R_{\theta JA}$	75	°C/W
Junction Temperature 结温	T_J	150	°C
Storage Temperature 储存温度	T_{stg}	-55~150	°C

■ Electrical Characteristics 电特性

($T_A=25^{\circ}\text{C}$ unless otherwise noted 如无特殊说明, 温度为 25°C)

Characteristic Parameters 特性参数	Symbol 符号	Min 最小值	Type 典型值	Max 最大值	Unit 单位	Condition 条件
Reverse Stand-off Voltage 反向工作电压	V_{RWM}		25.6		V	
Reverse Breakdown Voltage 反向击穿电压	V_{BR}	28.5		31.5	V	$I_{\text{T}}=1\text{mA}$
Reverse Leakage Current 反向漏电流	I_{R}			5	μA	$V_{\text{R}}=V_{\text{RWM}}$
Clamping Voltage 钳位电压	V_{C}			41.4	V	$I_{\text{PP}}=14.4\text{A}$
Diode Capacitance 二极管电容	C_{D}		500		pF	$V_{\text{R}}=20\text{V}, f=1\text{MHz}$

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 Characteristic Curve 典型特性曲线

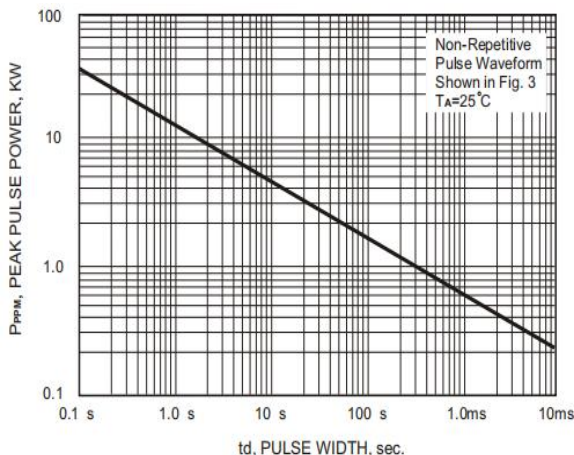


Figure 1: Peak Pulse Power Characteristics

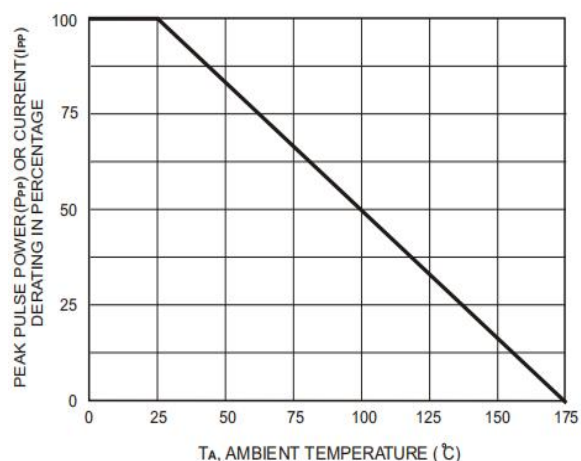


Figure 2: Peak Pulse Power Characteristics

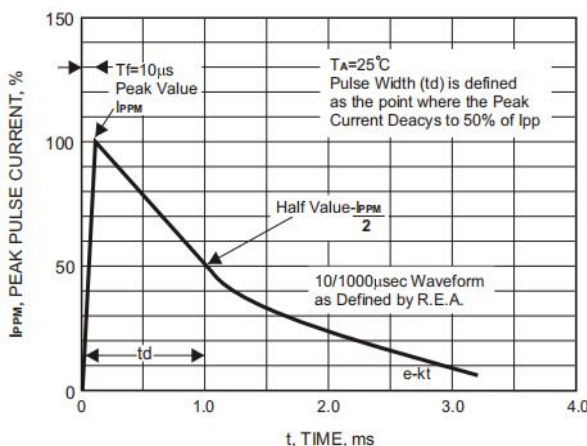


Figure 3: Pulse Form Waves

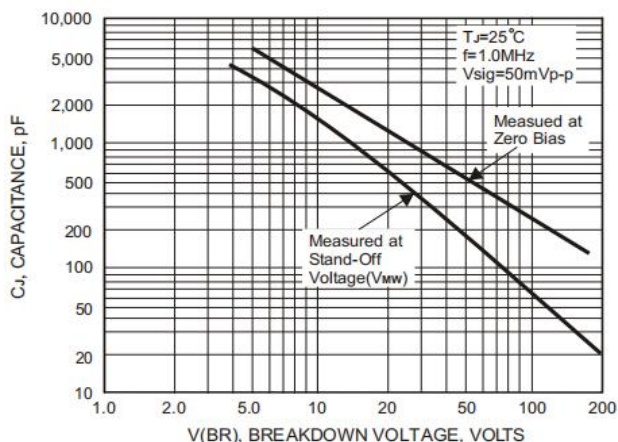


Figure 4: Junction Capacitance

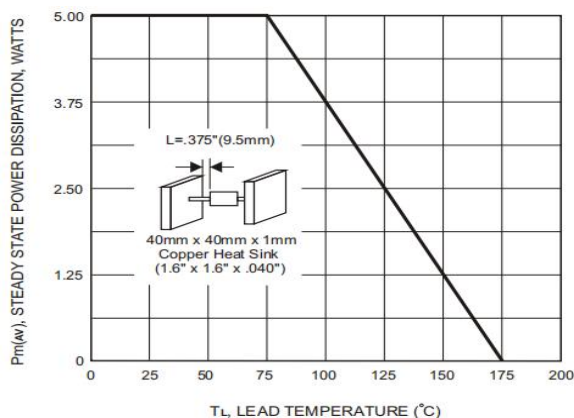


Figure 5: Power Derating

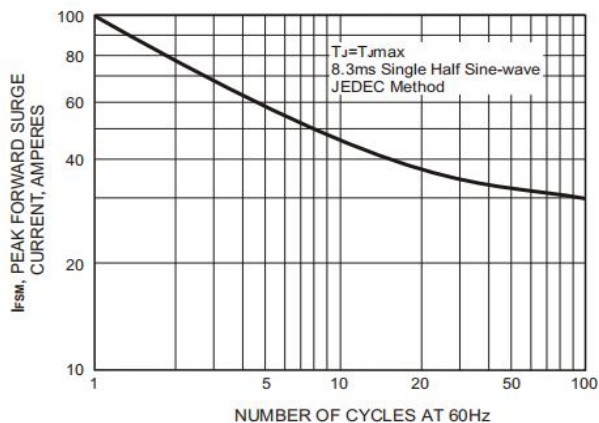


Figure 6: Forward Characteristics

■ Dimension 外形封装尺寸

