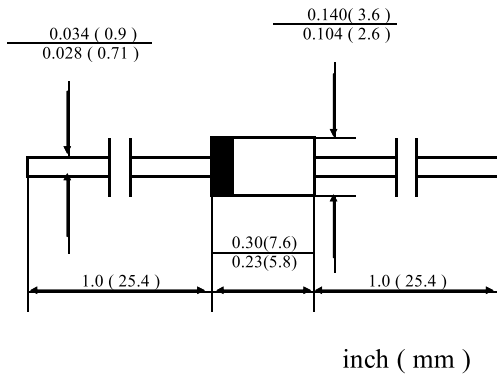


■外形尺寸和印记 Outline Dimensions and Mark
DO-15



■特征 Features

- I_o 2.0A
- VRRM 50V-600V
- 耐正向浪涌电流能力高
- High surge current capability

■极限值 (绝对最大额定值)

Limiting Values (Absolute Maximum Rating)

参数名称 Item	符号 Symbol	单位 Unit	条件 Conditions	BYV27-						
				50	100	150	200	300	400	600
反向重复峰值电压 Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	150	200	300	400	600
正向平均电流 Average Forward Current	$I_{F(AV)}$	A	正弦半波 60Hz, 电阻负载, $T_a=50^\circ\text{C}$ 60Hz Half-sine wave, Resistance load, $T_a=50^\circ\text{C}$	2.0			1.9		1.6	
正向 (不重复) 浪涌电流 Surge (Non-repetitive) Forward Current	I_{FSM}	A	正弦半波 60Hz, 一个周期, $T_a=25^\circ\text{C}$ 60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	100						
结温 Junction Temperature	T_J	$^\circ\text{C}$		-55~+125						
储存温度 Storage Temperature	T_{STG}	$^\circ\text{C}$		-55 ~ +150						

■电特性 (Ta=25°C 除非另有规定)

Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

参数名称 Item	符号 Symbol	单位 Unit	测试条件 Test Condition	BYV27-						
				50	100	150	200	300	400	600
正向峰值电压 Peak Forward Voltage	V_{FM}	V	$I_{FM}=2.0A$	0.95			1.05		1.25	
反向峰值电流 Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	$T_a=25^\circ\text{C}$						
	I_{RRM2}			$T_a=100^\circ\text{C}$						
反向恢复时间 Reverse Recovery time	t_r	ns	$I_F=0.5A$ $I_R=1A$ $I_{RR}=0.25A$	35			50			
热阻(典型) Thermal Resistance(Typical)	$R_{\theta J-A}$	$^\circ\text{C}/W$	结和环境之间 Between junction and ambient	75						

■ 特性曲线 (典型)

FIG. 1 -- TYPICAL FORWARD CHARACTERISTIC

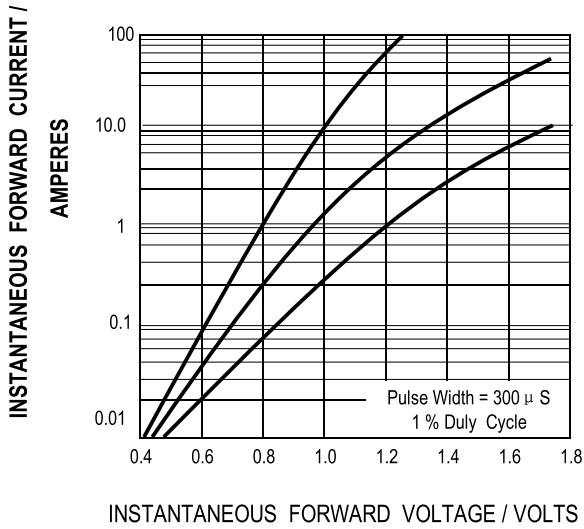


FIG. 2 -- TYPICAL JUNCTION CAPACITANCE

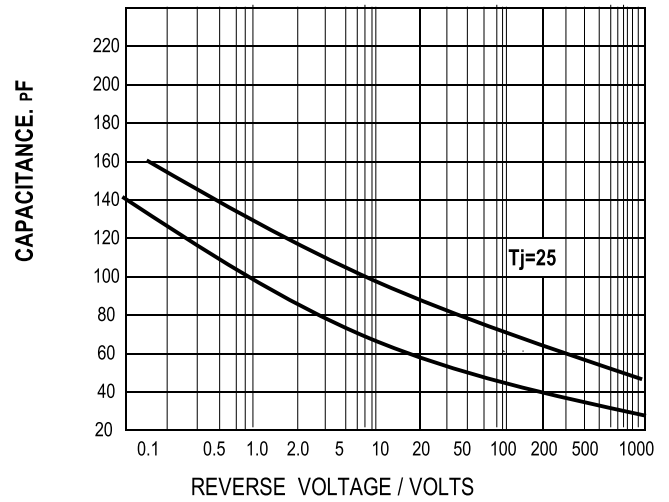


FIG. 3 -- FORWARD CURRENT DERATING CURVE

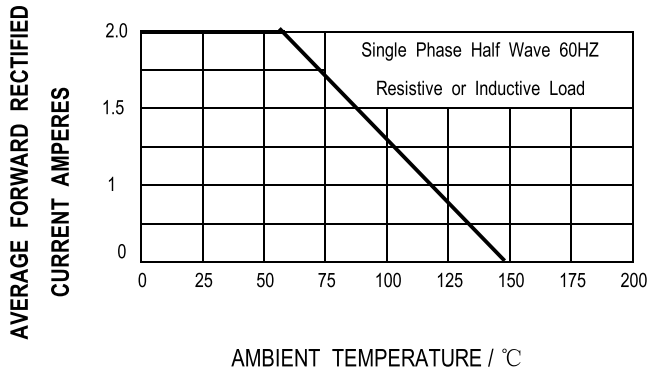


FIG. 4 -- PEAK FORWARD SURGE CURRENT

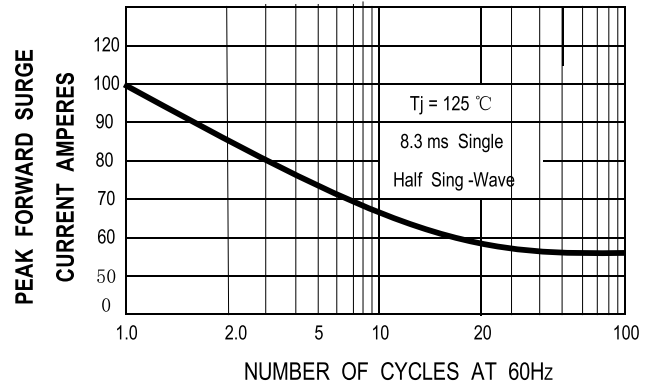


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time

