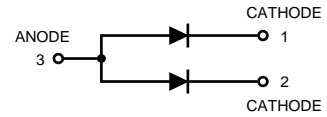


Silicon Switching Diode Array

Lead free product

Halogen-free type

BAW56WGH



MAXIMUM RATINGS

| Rating | Symbol | Value | Unit |
|------------------------------|------------------------|-------|------|
| Reverse Voltage | V _R | 70 | Vdc |
| Forward Current | I _F | 200 | mAdc |
| Forward Surge Current, t=1us | I _{FM(surge)} | 4.5 | Adc |

THERMAL CHARACTERISTICS

| Characteristic | Symbol | Max. | Unit |
|--|------------------|-------------|-------|
| Total Power Dissipation, T _s =103°C | P _{tot} | 250 | mW |
| Junction Temperature | T _J | 150 | °C |
| Storage Temperature | T _{STG} | -65 to +150 | °C |
| Junction Soldering Point ⁽¹⁾ | R _{θJS} | 190 | K / W |

(1) For calculation of R_{θJS} Please refer to Application Thermal Resistance.

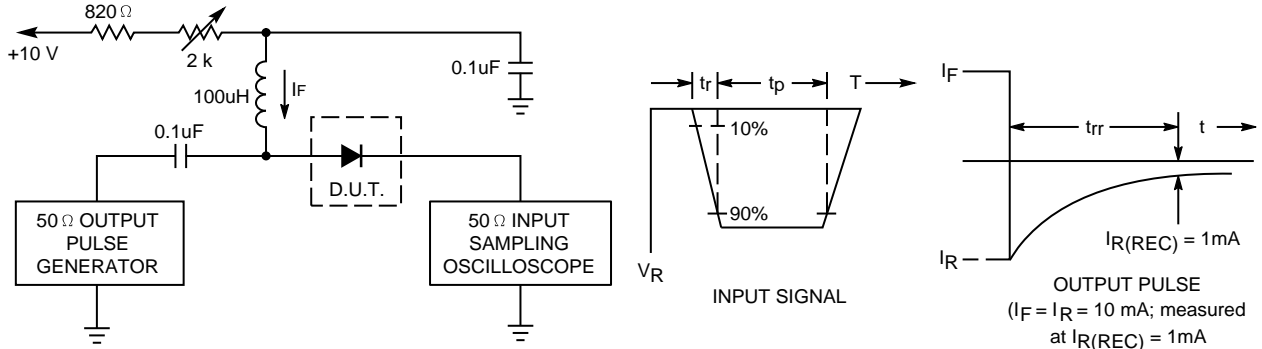
ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted) (EACH DIODE)

| Characteristic | Symbol | Min. | Max. | Unit |
|----------------|--------|------|------|------|
|----------------|--------|------|------|------|

OFF CHARACTERISTICS

| | | | | |
|--|-------------------|------------------|----------------------------|------|
| Reverse Breakdown Voltage (I _{BR} = 100uAdc) | V _(BR) | 70 | - | Vdc |
| Reverse Voltage Leakage Current (V _R =25Vdc, T _J =150°C) (V _R =70Vdc) (V _R =70Vdc, T _J =150°C) | I _R | - - - | 30 2.5 50 | uAdc |
| Diode Capacitance (V _R =0, f = 1.0 MHz) | C _D | - | 2.0 | pF |
| Forward Voltage (I _F = 1.0 mAdc) (I _F = 10 mAdc) (I _F = 50 mAdc) (I _F = 150 mAdc) | V _F | - - - - | 715 855 1000 1250 | mVdc |
| Reverse Recovery Time (I _F = I _R = 10 mAdc, I _{R(REC)} = 1.0 mAdc) (Figure 1) R _L = 100 Ω | t _{rr} | - | 6.0 | nS |

FIGURE 1. RECOVERY TIME EQUIVALENT TEST CIRCUIT



- Notes: 1. A 2.0kΩ variable resistor adjusted for a Forward Current (I_F) of 10mA.
- 2. Input pulse is adjusted so $I_{R(peak)}$ is equal to 10mA.
- 3. $t_p \gg t_{rr}$

FIGURE 2. FORWARD VOLTAGE

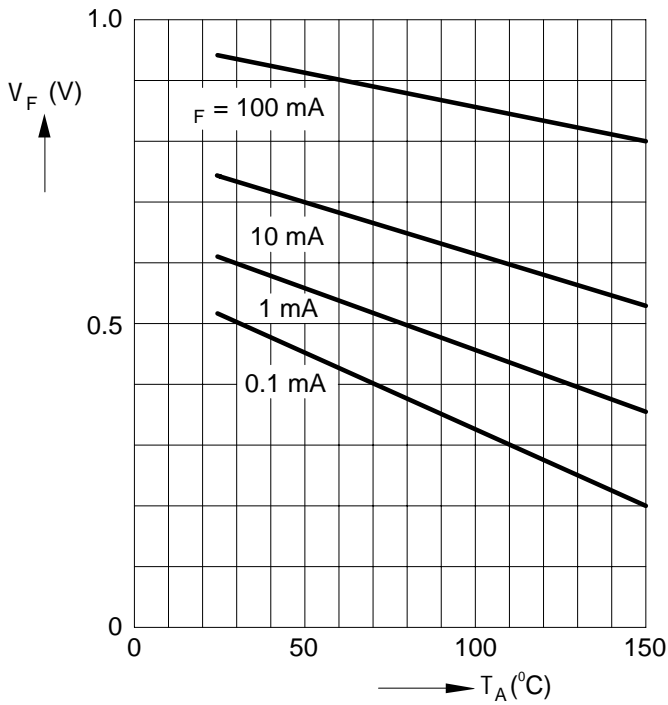


FIGURE 3. REVERSE CURRENT

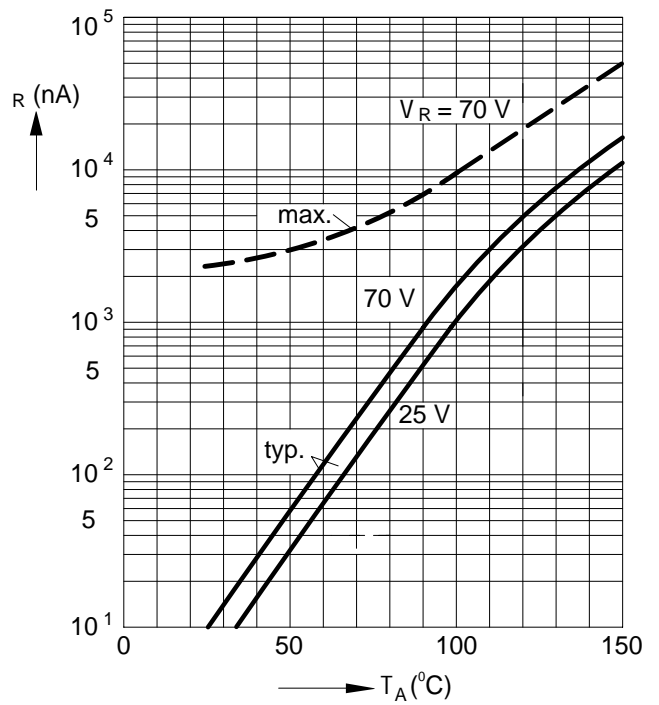


FIGURE 4. FORWARD CURRENT $I_F=f(T_S)$

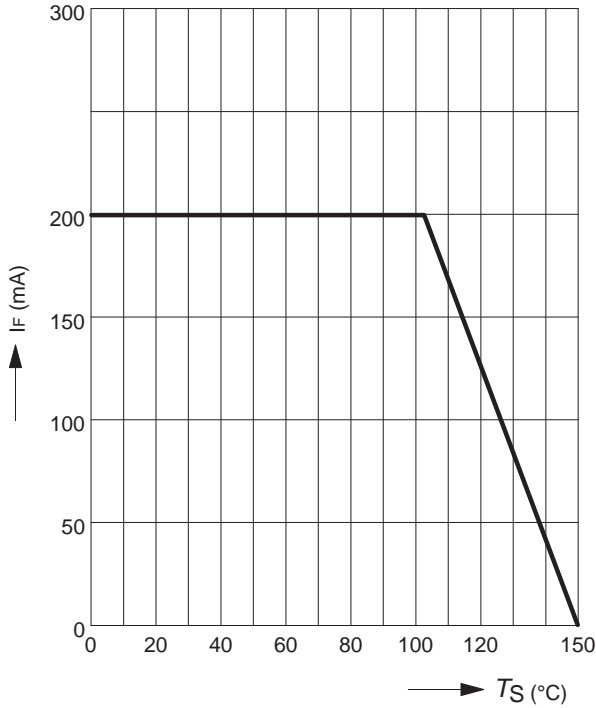


FIGURE 5. FORWARD CURRENT $I_F=f(V_F)$
 $T_a=25^\circ\text{C}$

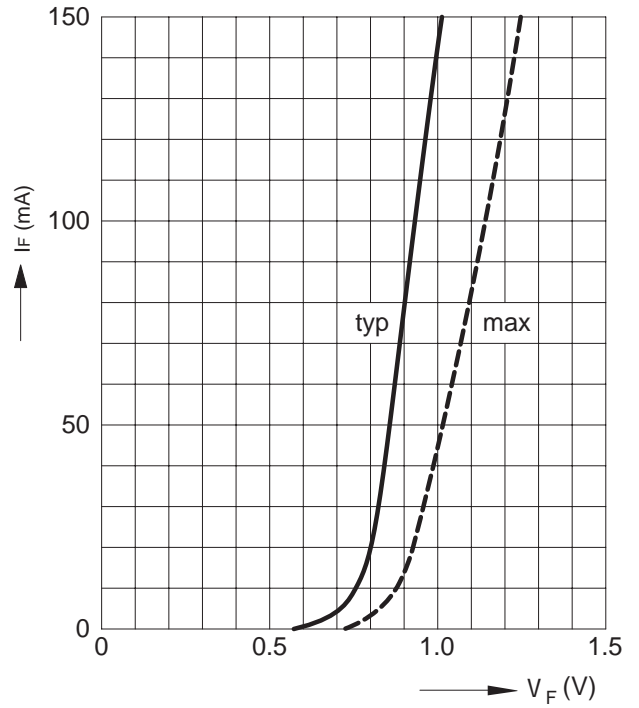


FIGURE 6. PERMISSIBLE PULSE LOAD $R_{\theta JS}=f(t_p)$

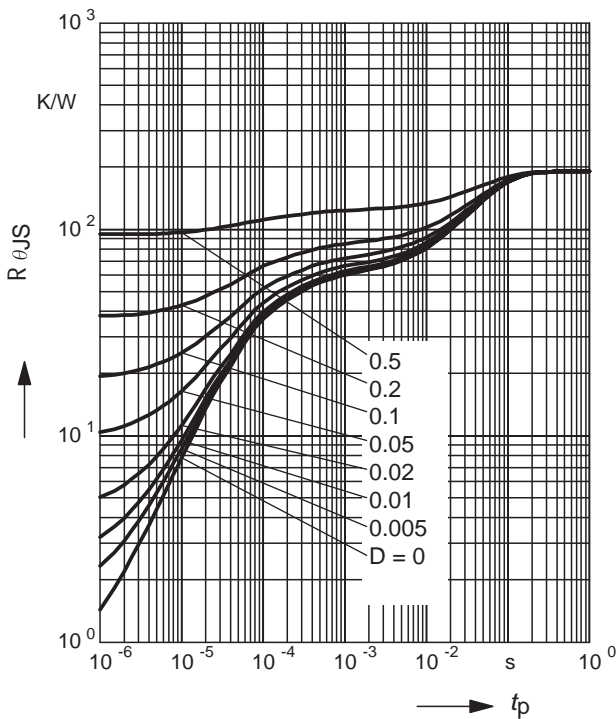


FIGURE 7. PERMISSIBLE PULSE LOAD
 $I_F \text{ max.} / I_{FDC}=f(t_p)$

