

Micro Commercial Components



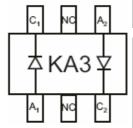
Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939

MMBD4448DW

Features

- For General Purpose Switching Applications
- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/Rohs Compliant ("P"Suffix designates RoHS Compliant. See ordering information)
- Ultra-Small Surface Mount Package
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- High Conductance, Power Dissipation
- Fast Switching Speed



Maximum Ratings

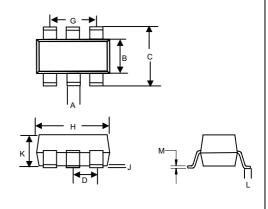
| Symbol | Rating | Rating | Unit |
|------------------|--|-------------|------------|
| V_{RM} | Non-Repetitive Peak Reverse Voltage | 100 | V |
| V_{RRM} | Peak Repetitive Reverse Voltage | | |
| V_{RWM} | Working Peak Reverse Voltage | 75 | V |
| V_R | DC Blocking Voltage | | |
| $V_{R(RMS)}$ | RMS Reverse Voltage | 53 V | |
| I _{FM} | Forward Continuous Current | 500 mA | |
| Io | Average Rectified Output Current | 250 | mA |
| I _{FSM} | Peak Forward Surge Current @1.0 μ s | 4.0 | Α |
| | @1.0s | 2.0 | A |
| R _{⊕JA} | Thermal Resistance Junction to Ambient | 625 | °C/W |
| P _D | Power dissipation | 200 | mW |
| TJ | Junction Temperature | 150 | $^{\circ}$ |
| T _{STG} | Storage Temperature | -65 to +150 | $^{\circ}$ |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Symbol | Parameter | Min | Max | Test Conditions |
|-----------------|------------------------------------|-------------|-------------------------------------|--|
| $V_{(BR)}$ | Reverse Breakdown Voltage | 75V | | I _R =10 μ A |
| I _R | Reverse Voltage Leakage Current | | 2.5 μ A 50 μ A 35 μ A 25nA | V _R =75V V _R =75V, T _J =150°C V _R =25V, T _J =150°C V _R =20V |
| V _F | Forward Voltage | 0.6 | 0.72V 0.855V 1.0V 1.25V | $I_F=5.0$ mA $I_F=10$ mA $I_F=50$ mA $I_F=150$ mA |
| Ст | Total Capacitance | | 4.0pF | V _R =0V, f=1MHZ |
| t _{rr} | Reverse Recovery Time | | 4.0ns | $I_R==I_F=10\text{mA},$ $Irr=0.1xI_R,$ $R_L=100 \Omega$ |

200mW Switching Diodes

SOT-363

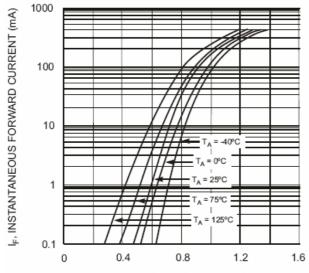


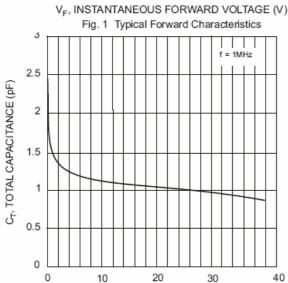
| DIMENSIONS | | | | | | |
|------------|--------|------|-------------|------|------|--|
| | INCHES | | MM | | | |
| DIM | MIN | MAX | MIN | MAX | NOTE | |
| Α | .006 | .014 | 0.15 | 0.35 | | |
| В | .045 | .053 | 1.15 | 1.35 | | |
| С | .085 | .096 | 2.15 | 2.45 | | |
| D | .026 | | 0.65Nominal | | | |
| G | .047 | .055 | 1.20 | 1.40 | | |
| Н | .071 | .087 | 1.80 | 2.20 | | |
| J | | .004 | | 0.10 | | |
| K | .035 | .043 | 0.90 | 1.10 | | |
| L | .010 | .018 | 0.26 | 0.46 | | |
| M | 003 | 006 | 0.08 | 0.15 | | |

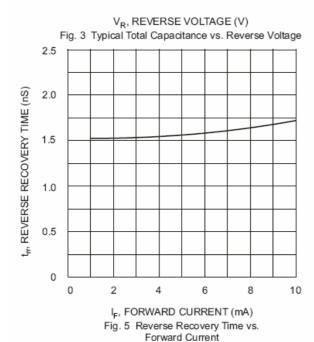
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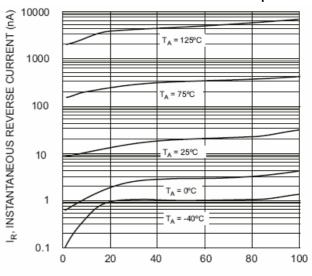


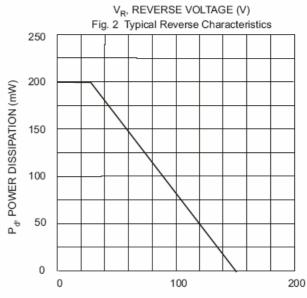












T_A, AMBIENT TEMPERATURE (°C) Fig. 4 Power Derating Curve, Total Package



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Ordering Information:

| Device | Packing | |
|----------------|-----------------------|--|
| Part Number-TP | Tape&Reel: 3Kpcs/Reel | |

Note: Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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AMEYA360 Components Supply Platform

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Website:

Welcome to visit www.ameya360.com

Contact Us:

> Address:

401 Building No.5, JiuGe Business Center, Lane 2301, Yishan Rd Minhang District, Shanghai , China

> Sales:

Direct +86 (21) 6401-6692

Email amall@ameya360.com

QQ 800077892

Skype ameyasales1 ameyasales2

Customer Service :

Email service@ameya360.com

Partnership :

Tel +86 (21) 64016692-8333

Email mkt@ameya360.com