



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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BAT42 BAT43

Features

- Moisture Sensitivity Level 1
- Low Forward Voltage Drop.
- Compression Bond Construction
- For General Purpose Application
- Marking: Cathode band and type number
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)

200 Milliamp Small Signal Schottky Diode 30 Volt

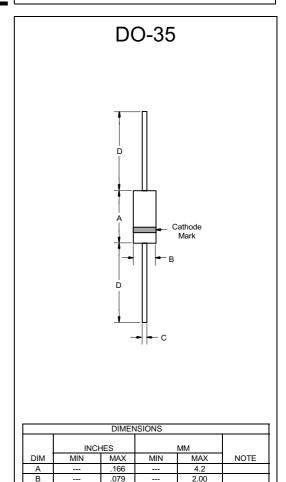
Maximum Ratings

- Operating Temperature: -55°C to +125°C
- Storage Temperature: 55°C to +150°C
- Maximum Thermal Resistance; 300°C/W Junction To Ambient

Electrical Characteristics @ 25°C Unless Otherwise Specified

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Peak Reverse Voltage	V_{RM}	30V	
Forward continuous Current	I _F	200mA	T _A = 25°C
Power Dissipation	P _{TOT}	200mW	$T_A = 65^{\circ}C$
Junction Temperature	TJ	125°C	
Peak Forward Surge Current	I _{FSM}	4.0A	T_p <10ms, T_A = 25°C
Maximum Instantaneous Forward Voltage BAT42	V _F	1.0V 0.65V 0.4V 1.0V 0.45V 0.33V	$I_F = 200 \text{mA};$ $I_F = 50 \text{mA}$ $I_F = 10 \text{mA}$ $I_F = 200 \text{mA}$ $I_F = 15 \text{mA}$ $I_F = 2 \text{mA}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I _R	0.5μA 100μA	V_R =25Volts T_J = 25°C T_J = 100°C
Typical Junction Capacitance	С	7pF	Measured at 1.0MHz, V _R =25V
Reverse Recovery Time	T _{rr}	5nS	$I_F=10\text{mA}$ $V_R=6V$ $R_L=100\Omega$

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 5.



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Figure 1. Forward current versus forward voltage at different temperatures(typical values)

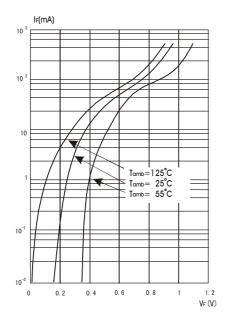


Figure 2. Forward current versus forward voltage (typical values)

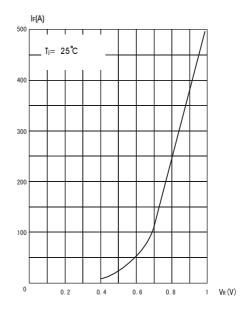


Figure 3.Reverse current versus ambient temperature(typical values)

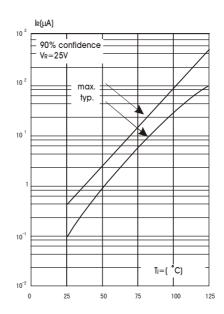




Figure 4.Reverse current versus continuous Reverse voltage(typical values)

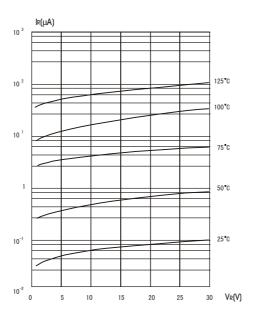
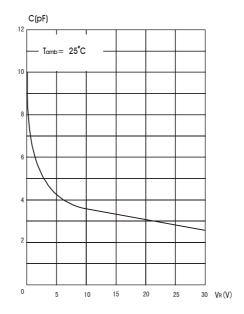


Figure 5.Capacitance C versus reverse applied voltage V_R (typical values)





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Ordering Information:

Device	Packing	
Part Number-TP	Tape&Reel: 10Kpcs/Reel	
Part Number-AP	Ammo Packing: 5Kpcs/Ammo Box	
Part Number-BP	Bulk: 100Kpcs/Carton	

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