



Micro Commercial Components

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BAT42 BAT43

200 Milliamp Small Signal Schottky Diode 30 Volt

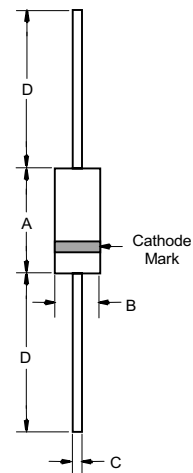
Features

- 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)

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

DO-35



Electrical Characteristics @25°C Unless Otherwise Specified

Peak Reverse Voltage	V_{RM}	30V	
Forward continuous Current	I_F	200mA	$T_A = 25^\circ C$
Power Dissipation	P_{TOT}	200mW	$T_A = 65^\circ C$
Junction Temperature	T_J	125°C	
Peak Forward Surge Current	I_{FSM}	4.0A	$T_p < 10ms,$ $T_A = 25^\circ C$
Maximum Instantaneous Forward Voltage	V_F	1.0V	$I_F = 200mA;$
BAT42		0.65V	$I_F = 50mA$
BAT43		0.4V	$I_F = 10mA$
		1.0V	$I_F = 200mA$
		0.45V	$I_F = 15mA$
		0.33V	$I_F = 2mA$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	0.5µA 100µA	$V_R = 25Volts$ $T_J = 25^\circ C$ $T_J = 100^\circ C$
Typical Junction Capacitance	C_J	7pF	Measured at 1.0MHz, $V_R = 25V$
Reverse Recovery Time	T_{rr}	5nS	$I_F = 10mA$ $V_R = 6V$ $R_L = 100\Omega$

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	.166	---	4.2	
B	---	.079	---	2.00	
C	---	.020	---	.52	
D	1.000	---	25.40	---	

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.

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

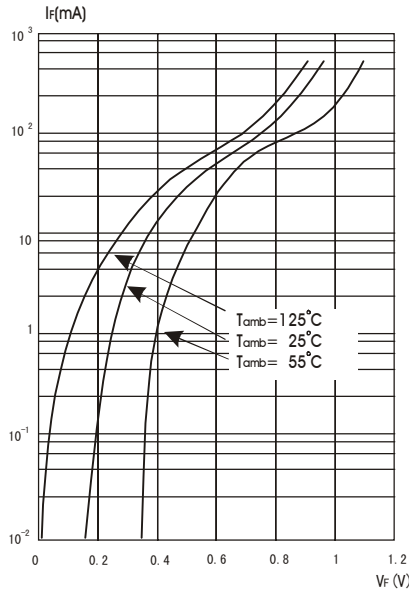


Figure 2. Forward current versus forward voltage (typical values)

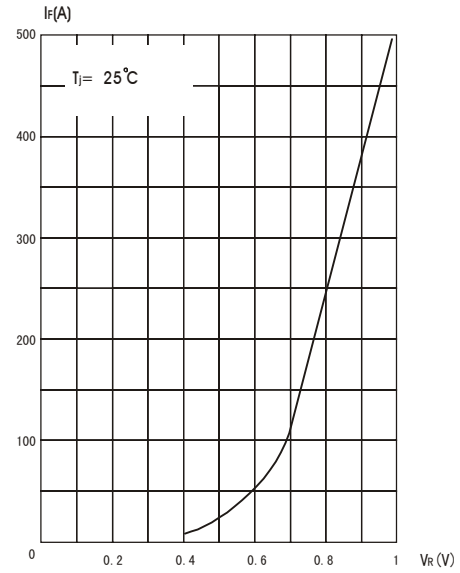
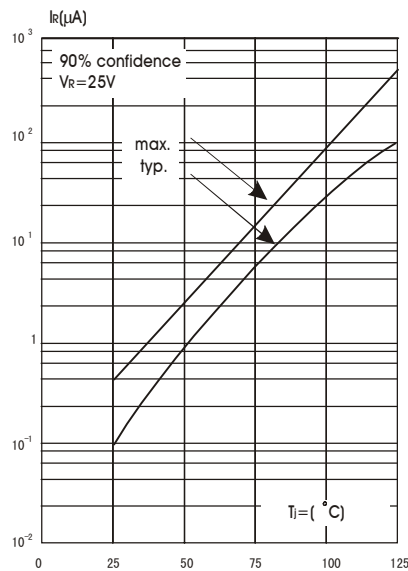


Figure 3. Reverse current versus ambient temperature (typical values)



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

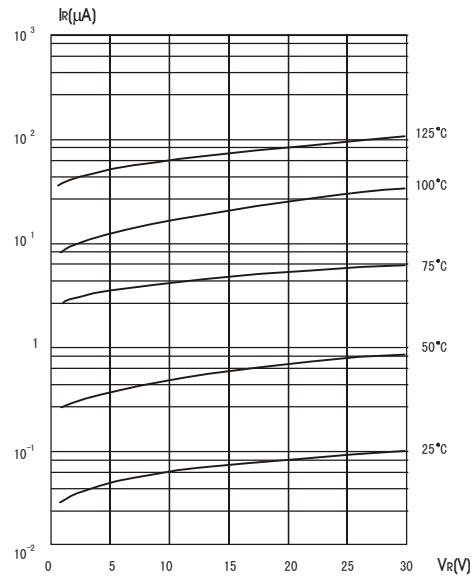
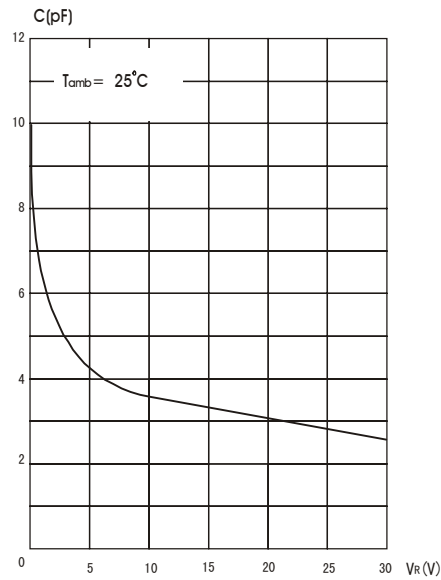


Figure 5. Capacitance C versus reverse applied
voltage V_r (typical values)





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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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