



Micro Commercial Components



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# BAT42 BAT43

## 200 Milliamp Small Signal Schottky Diode 30 Volt

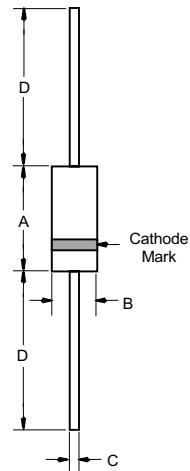
### Features

- 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	$I_F = 50mA$
		0.4V	$I_F = 10mA$
BAT43		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 5.

# BAT42 BAT43

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

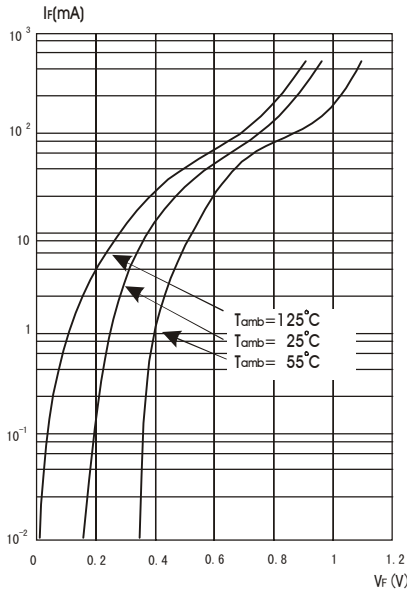


Figure 2. Forward current versus forward voltage (typical values)

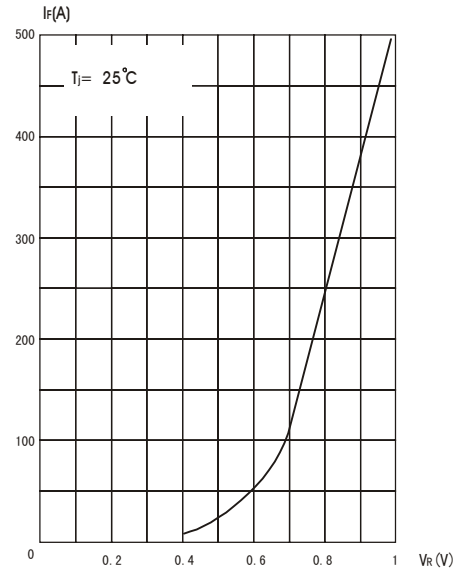
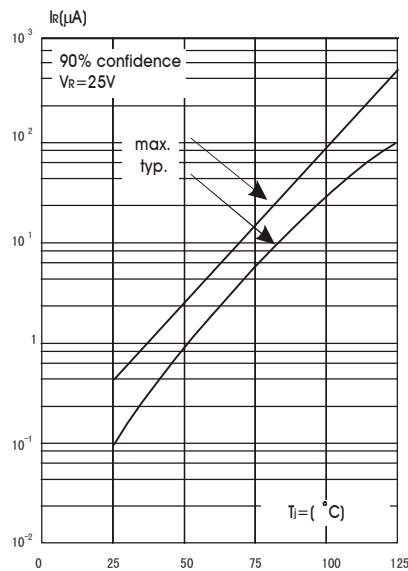


Figure 3. Reverse current versus ambient temperature (typical values)



# BAT42 BAT43

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

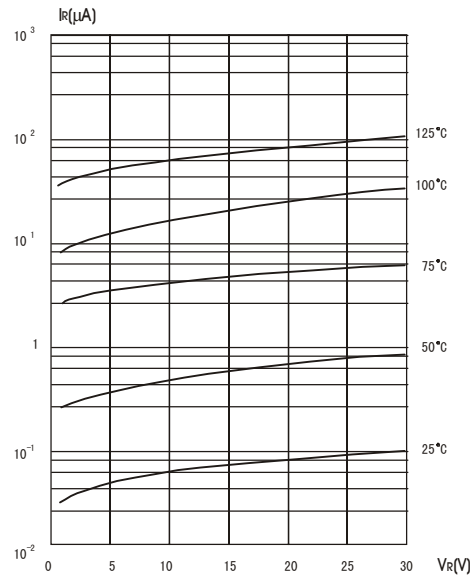
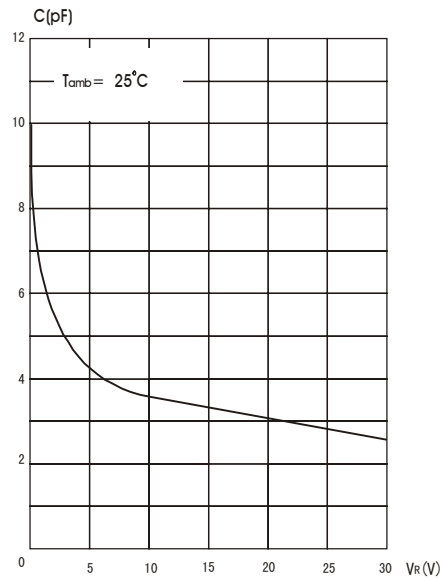


Figure 5. Capacitance C versus reverse applied voltage  $V_r$  (typical values)





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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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