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BAT42 BAT43

Features

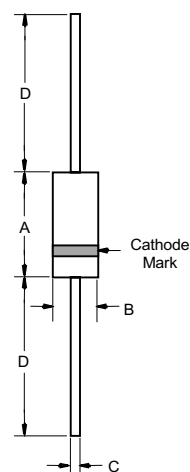
- Moisture Sensitivity Level 1
- Low Forward Voltage Drop.
- Compression Bond Construction
- For General Purpose Application
- Marking : Cathode band and type number
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

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

200 Milliamp Small Signal Schottky Diode 30 Volt

DO-35



Electrical Characteristics @ 25°C Unless Otherwise Specified

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

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.

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

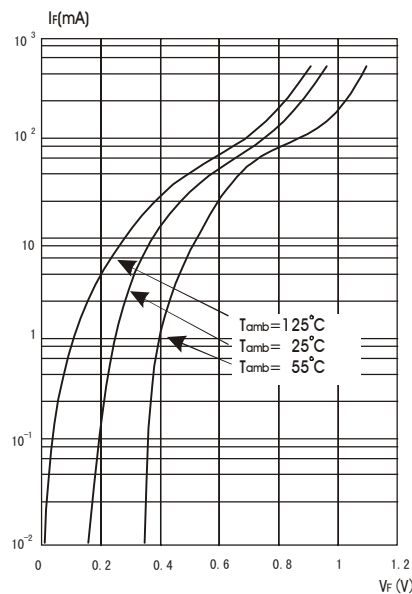


Figure 2. Forward current versus forward voltage (typical values)

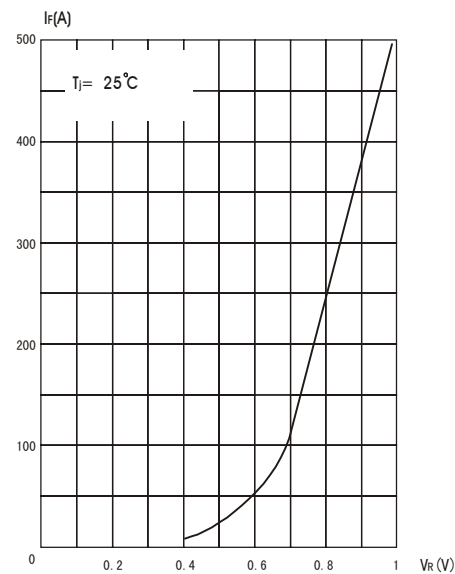
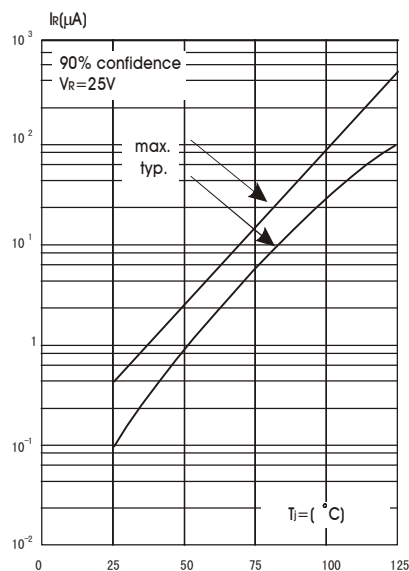


Figure 3. Reverse current versus ambient temperature(typical values)



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

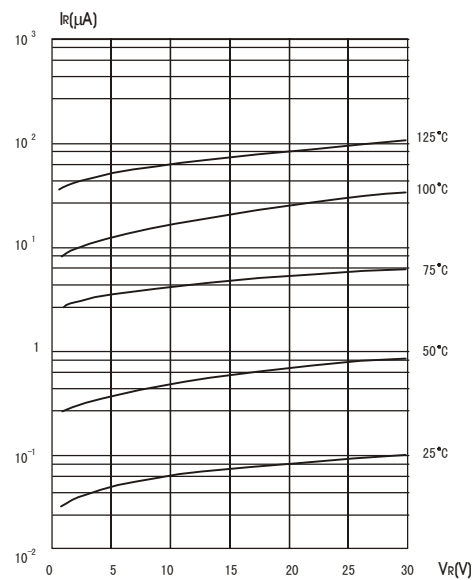


Figure 5.Capacitance C versus reverse applied
voltage V_R (typical values)

