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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

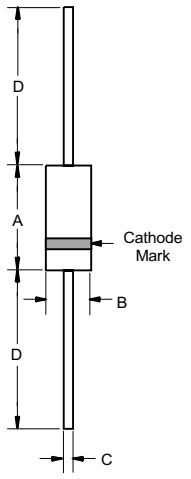
- Operating Temperature: -55°C to +125°C
- Storage Temperature: 55°C to +150°C
- Maximum Thermal Resistance; 300°C/W Junction To Ambient

Electrical Characteristics @ 25°C Unless Otherwise Specified

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

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

DO-35



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

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

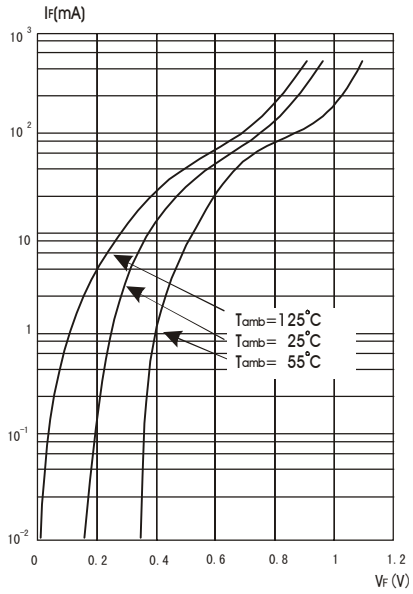


Figure 2. Forward current versus forward voltage (typical values)

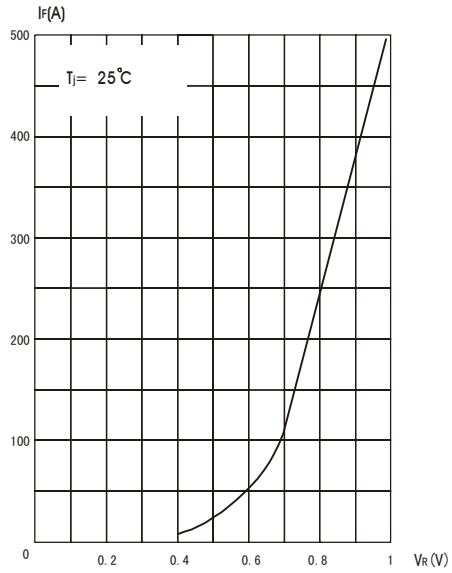


Figure 3.Reverse current versus ambient temperature(typical values)

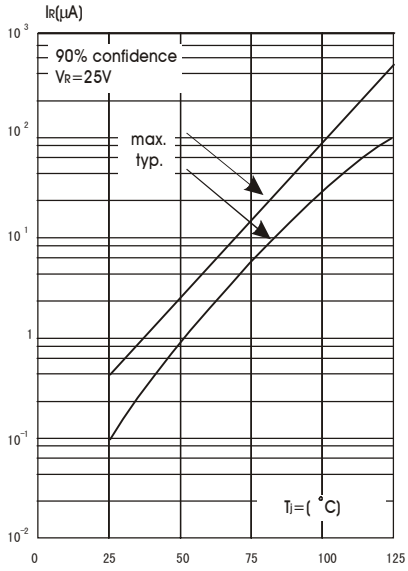


Figure 4.Reverse current versus continuous Reverse voltage(typical values)

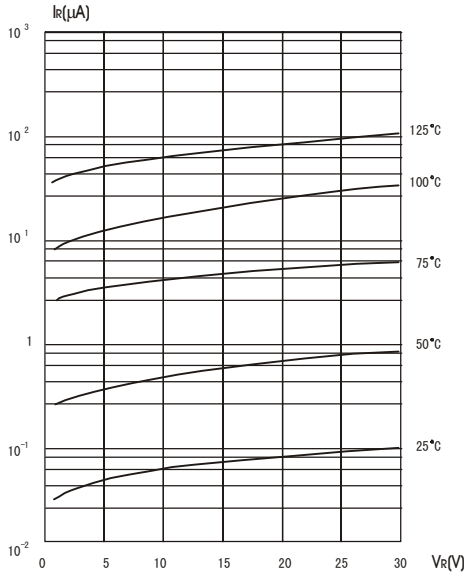


Figure 5.Capacitance C versus reverse applied voltage V_R (typical values)