



Shanghai Lunsure Electronic
Technology Co.,Ltd
Tel:0086-21-37185008
Fax:0086-21-57152769

BAT42 BAT43

Features

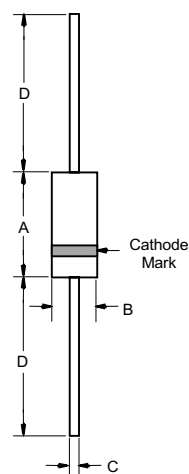
- Low Forward Voltage Drop.
- Compression Bond Construction
- For General Purpose Application

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

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	1.0V	$I_F = 200\text{mA};$
BAT42		0.65V	$I_F = 50\text{mA}$
		0.4V	$I_F = 10\text{mA}$
BAT43		1.0V	$I_F = 200\text{mA}$
		0.45V	$I_F = 15\text{mA}$
		0.33V	$I_F = 2\text{mA}$
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	---	

BAT42

BAT43

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

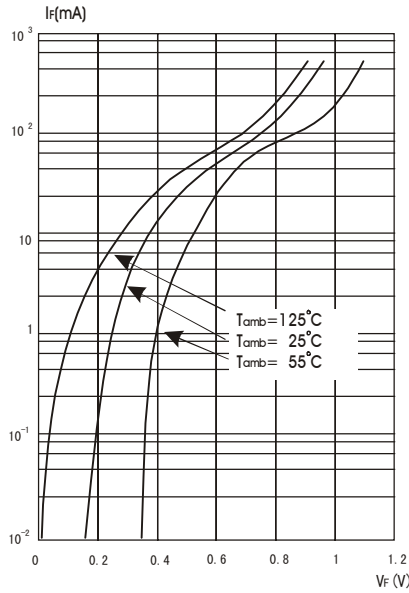


Figure 2. Forward current versus forward voltage (typical values)

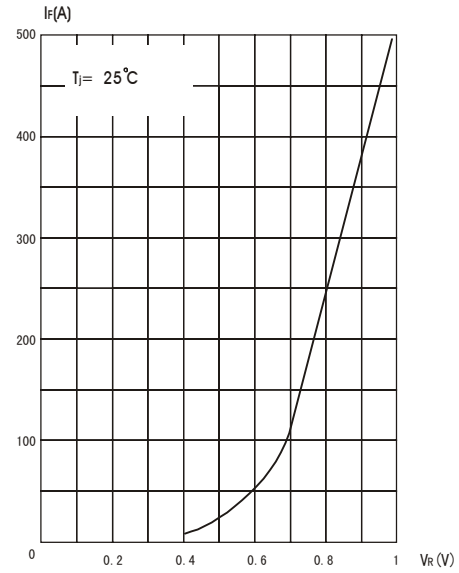
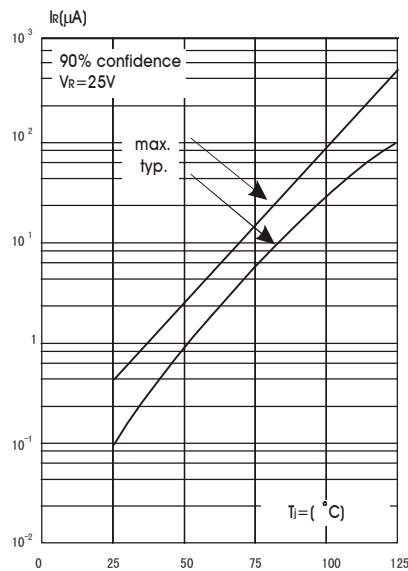


Figure 3. Reverse current versus ambient temperature (typical values)



BAT42
BAT43



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

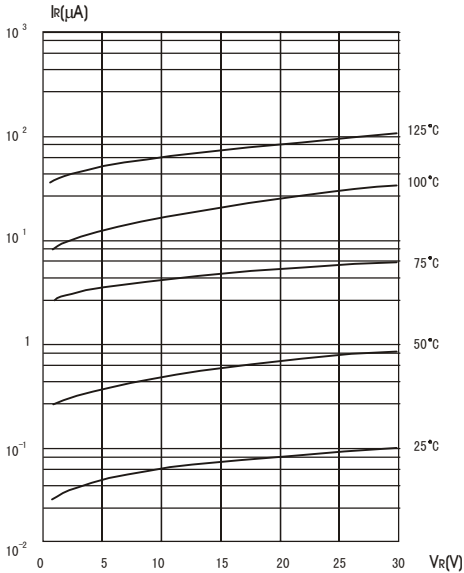


Figure 5. Capacitance C versus reverse applied voltage V_r (typical values)

