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BAT45

30Milliamp Small Signal Schottky Diode 15 Volt

Features

- Moisture Sensitivity Level 1
- Metal-to-silicon junction
- Low turn-on voltage
- Ultrafast switching speed
- 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; 400°C/W Junction To Ambient

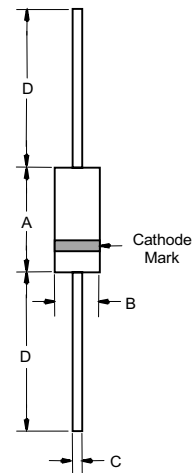
Electrical Characteristics @ 25°C Unless Otherwise Specified

Peak Reverse Voltage	V_{RM}	15V	
Forward continuous Current	I_F	30mA	$T_A = 25^\circ\text{C}$
Junction Temperature	T_J	125°C	
Peak Forward Surge Current	I_{FSM}	60mA	$T_p \leq 1s,$ $T_A = 25^\circ\text{C}$
Maximum Instantaneous Forward Voltage	V_F^*	0.38V 0.53V 1.0V	$I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 30\text{mA}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	100nA	$V_R = 6.0\text{Volts}$ $T_J = 25^\circ\text{C}$
Reverse Breakover Voltage	V_R	15V	$I_R = 10\mu\text{A}$
Typical Junction Capacitance	C_J	2.0 pF	Measured at 1.0MHz, $V_R = 1\text{V}$

* Pulse Test: 300μSec pulse width, 2% duty cycle

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

DO-35



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	---	



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

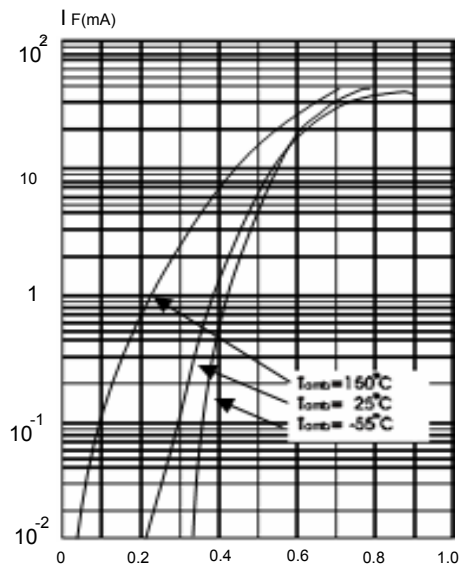


Figure 2. Forward current versus forward voltage (typical values)

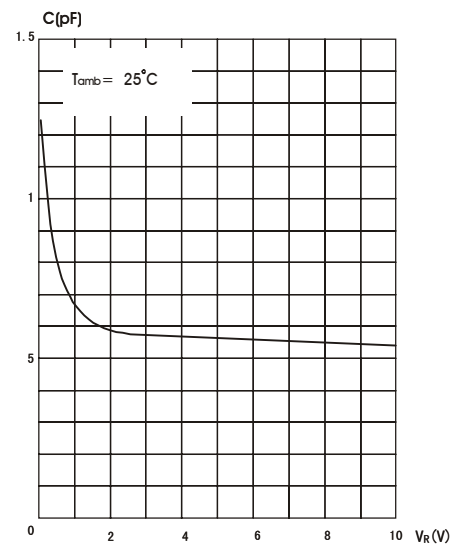


Figure 3. Reverse current versus ambient temperature

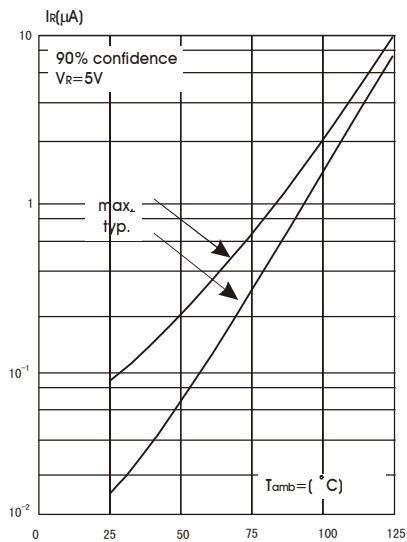


Figure 4. Reverse current versus continuous reverse voltage (typical values)

