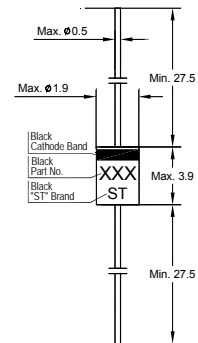


# BAT42, BAT43

## SCHOTTKY BARRIER DIODES

for general purpose applications



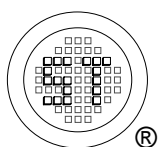
Glass Case DO-35  
Dimensions in mm

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	30	V
Forward Continuous Current	$I_F$	200	mA
Repetitive Peak Forward Current (at $t_p < 1\text{ s}$ )	$I_{FRM}$	500	mA
Surge Forward Current (at $t_p < 10\text{ ms}$ )	$I_{FSM}$	4	A
Power Dissipation	$P_{tot}$	200	mW
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 150	$^\circ\text{C}$

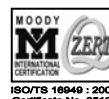
### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at $I_F = 200\text{ mA}$	$V_F$	-	-	1	V
at $I_F = 10\text{ mA}$	BAT42 $V_F$	-	-	0.4	V
at $I_F = 50\text{ mA}$	BAT42 $V_F$	-	-	0.65	V
at $I_F = 2\text{ mA}$	BAT43 $V_F$	0.26	-	0.33	V
at $I_F = 15\text{ mA}$	BAT43 $V_F$	-	-	0.45	V
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	30	-	-	V
Reverse Leakage Current at $V_R = 25\text{ V}$	$I_R$	-	-	0.5	$\mu\text{A}$
Diode Capacitance at $V_R = 1\text{ V}$ , $f = 1\text{ MHz}$	$C_{tot}$	-	7	-	pF
Reverse Recovery Time at $I_F = I_R = 10\text{ mA}$ , $I_{rr} = 0.1 \times I_R$ , $R_L = 100\text{ }\Omega$	$t_{rr}$	-	-	5	ns



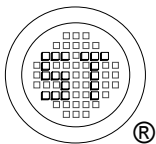
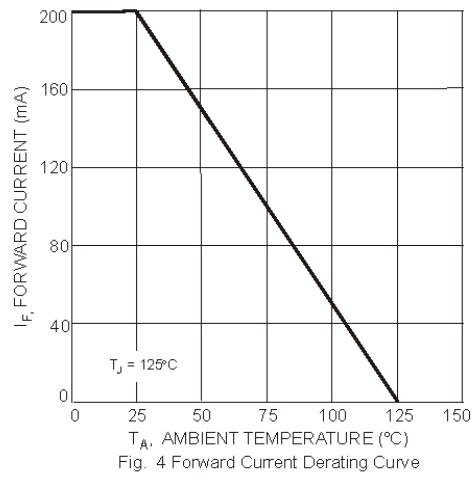
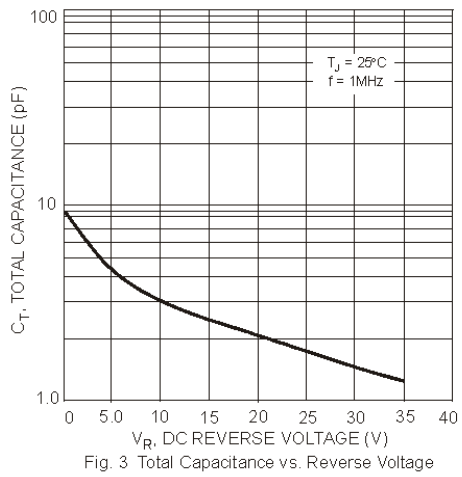
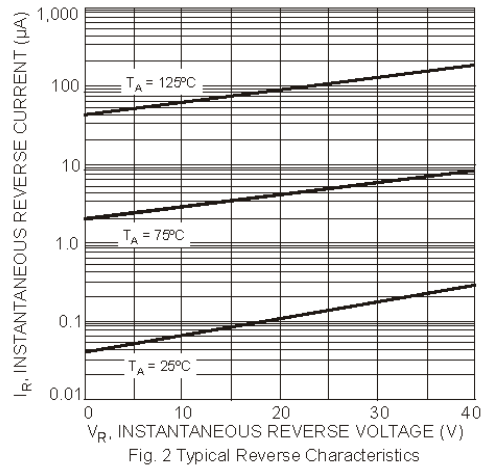
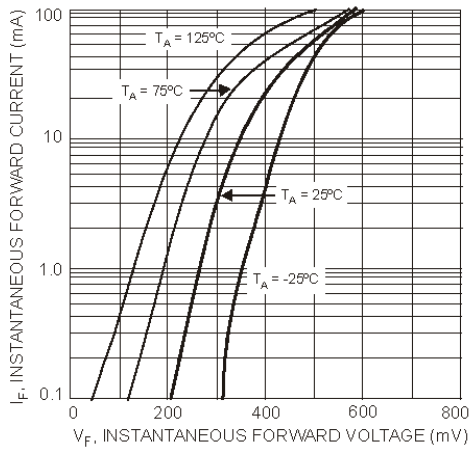
**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)

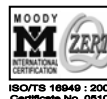


Dated : 06/03/2009

# BAT42, BAT43



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ISO/TS 16949:2002 Certificate No. 05103 | ISO 14001:2004 Certificate No. 7116 | ISO 9001:2000 Certificate No. 050059 | BS-OHSAS 18001:2007 Certificate No. 7116 | IECQ QC 080000 Certificate No. 050059

Dated : 06/03/2009