



Schottky Barrier Diode

Features

1. High reliability
2. Very low forward voltage
3. Integrated protection ring against static discharge

Applications

Applications where a very low forward voltage is required



Absolute Maximum Ratings

$T_j=25^{\circ}\text{C}$

Parameter	Test Conditions	Symbol	Value	Unit
Continuous reverse voltage		V_R	30	V
Forward continuous current	$T_{amb}=25^{\circ}\text{C}$	I_F	200	mA
Peak forward current	$T_{amb}=25^{\circ}\text{C}$	I_{FM}	300	mA
Surge forward current	$t_p \leq 1 \text{ s}, T_{amb}=25^{\circ}\text{C}$	I_{FSM}	600	mA
Power dissipation	$T_{amb}=65^{\circ}\text{C}$	P_{tot}	200	mW
Maximum junction temperature		T_j	125	$^{\circ}\text{C}$
Ambient operating temperature range		T_A	-65~+125	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-65~+150	$^{\circ}\text{C}$

Stresses exceeding maximum ratings may damage the device. Maximum ratings are stress ratings only. Functional operation above the recommended operating conditions is not implied. Extended exposure to stresses above the recommended operating conditions may affect device reliability.



Electrical Characteristics

 $T_j=25^{\circ}\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=10\mu\text{A}$ (pulsed)	30	-	-	V
Leakage current	I_R	$V_R=25\text{V}$	-	-	2	μA
Forward voltage Pulse test $t_p < 300\mu\text{s}$, $\delta < 2\%$	V_F	$I_F=0.1\text{mA}$	-	-	0.24	V
		$I_F=1\text{mA}$	-	-	0.32	V
		$I_F=10\text{mA}$	-	-	0.4	V
		$I_F=30\text{mA}$	-	0.5	-	V
		$I_F=100\text{mA}$	-	-	0.8	V
Capacitance	C_{tot}	$V_R=1\text{V}$, $f=1\text{MHz}$	-	-	10	pF
Reverse recovery time	t_{rr}	$I_F=10\text{mA}$ to $I_R=10\text{mA}$ to $I_R=0.1\text{mA}$ I_R	-	-	5	ns



Characteristics ($T_J=25^\circ\text{C}$ unless otherwise specified)

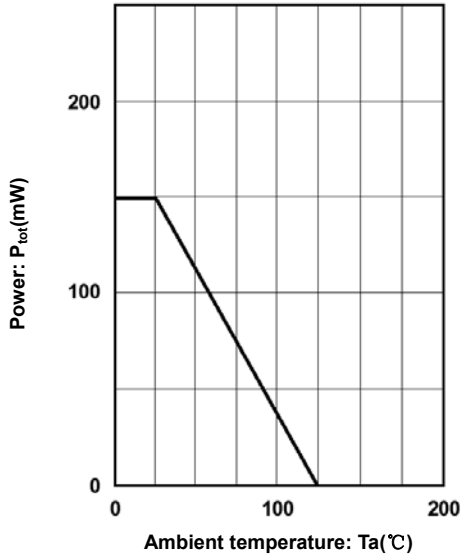


Figure 1. Admissible power dissipation vs. ambient temperature

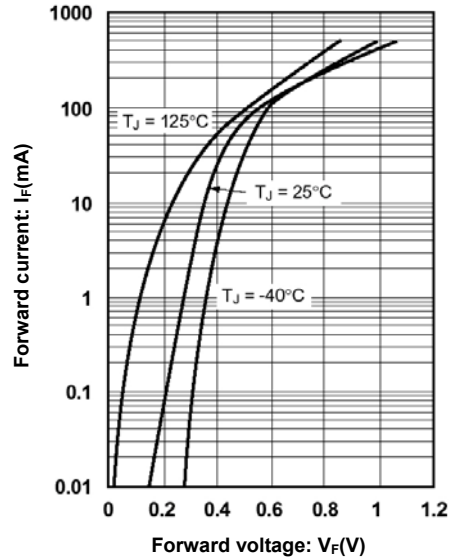


Figure 2. Typical instantaneous forward characteristics

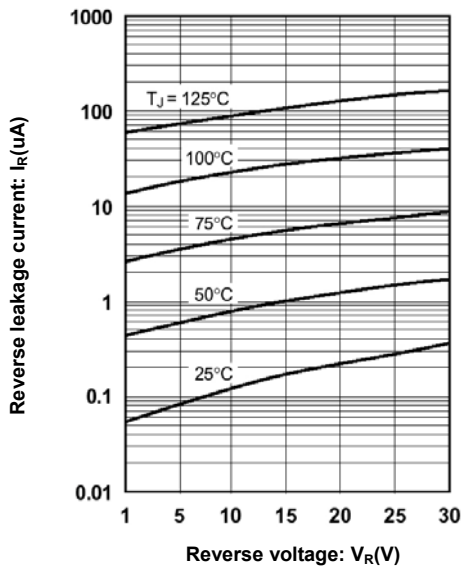


Figure 3. Typical reverse characteristics

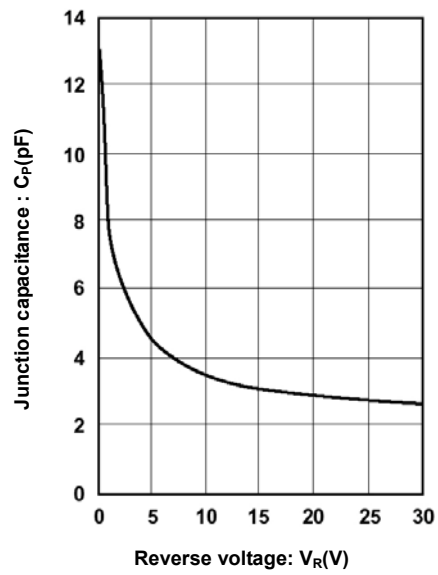
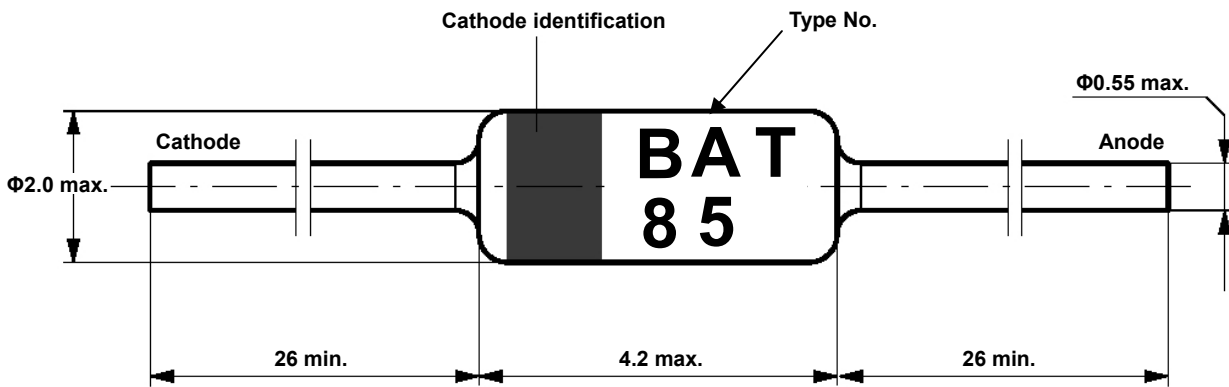


Figure 4. Typical junction capacitance



Dimensions in mm



Standard Glass Case
JEDEC DO-35

Marking

