

200mA,30V Schottky Diodes

Features

- Low leakage current
- Schottky barrier diodes
- Low forward voltage drop
- For general purpose applications
- Moisture sensitivity: level 1, per J-STD-020
- For fast switching and low logic level applications
- High temperature soldering guaranteed: 260°C/10 seconds



DO-35(DO-204AH)

Applications

- HF-Detector, Protection circuit
- DC/DC converter for notebooks
- Small battery charger, Power supplies

Maximum Ratings & Electrical Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	BAT42	BAT43	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	30		V
Forward continuous current	I _F	200		mA
Repetitive peak forward current at t _p <1s, δ<0.5	I _{FRM}	500		mA
Power dissipation (infinite heatsink)	P _{tot}	200		mW
Surge forward current at t _p <10ms	I _{FSM}	4		A
Maximum junction temperature	T _J	125		°C
Storage temperature range	T _{STG}	-65 to +150		°C

Thermal-Mechanical Specifications (T_A=25°C unless otherwise noted)

Parameter	Symbol	Typ	Unit
Thermal Resistance, Junction to Ambient	R _{θJA}	300	°C /W

Electrical Specifications (T_A=25°C unless otherwise noted)

Parameter	Symbol	Test Conditions	Typ	Max	Unit
Maximum forward voltage pulse test tp<300us, δ<2%	V _F	I _F =200mA	-	1.00	V
		I _F =10mA	-	0.40	
		I _F =50mA	-	0.65	
		I _F =2mA	-	0.33	
		I _F =15mA	-	0.45	
Maximum leakage current pulse test tp<300us, δ<2%	I _R	V _R =25V T _J =25°C	-	0.5	uA
		V _R =25V T _J =100°C	-	100	
Typical junction capacitance	C _{tot}	1 V 1 MHz		7	pF
Maximum reverse recovery time	t _{rr}	I _F =I _R =10mA I _{rr} =1mA, RL=100Ω		5	nS

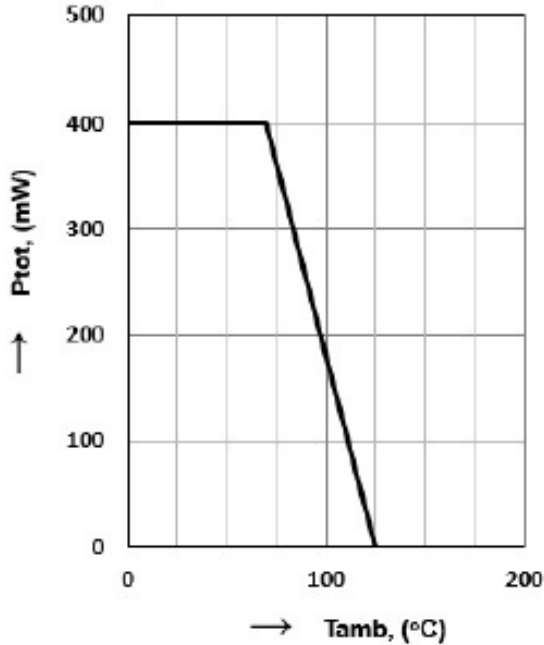
Note:

1. Valid provided that electrodes are kept at ambient temperature.

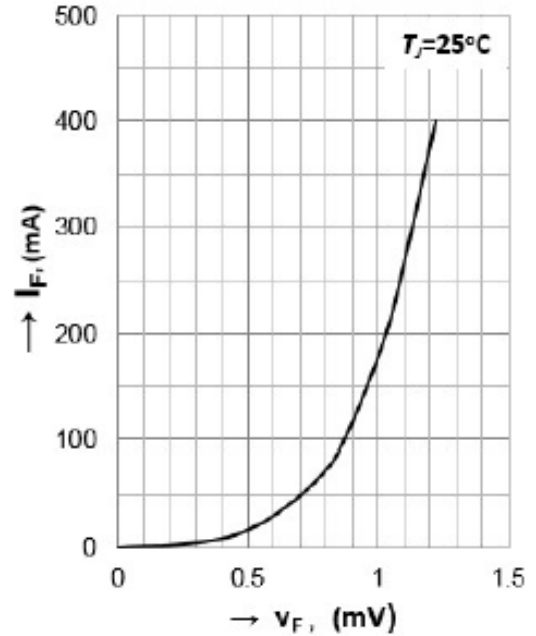
Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)

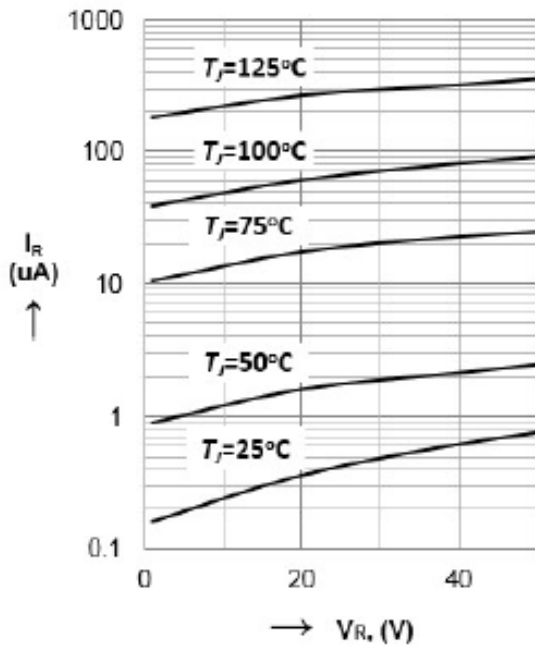
Admissible power dissipation versus ambient temperature
Valid provided that leads are kept ambient temperature at a distance of 9.5 mm from case



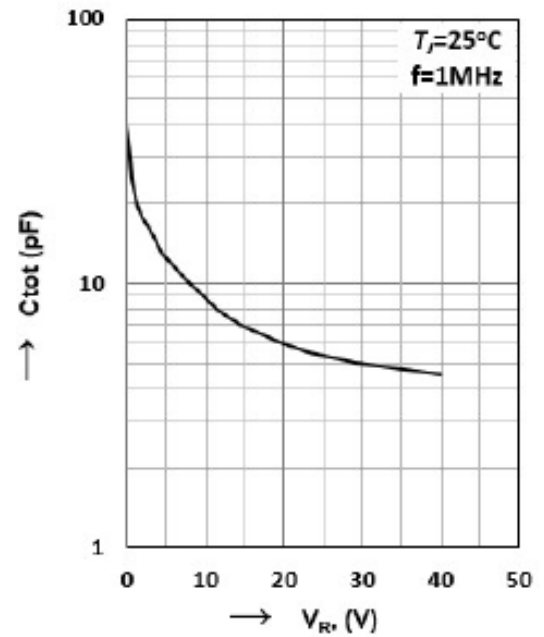
Forward characteristics



Leakage current versus junction temperature



Typical capacitance versus reverse voltage

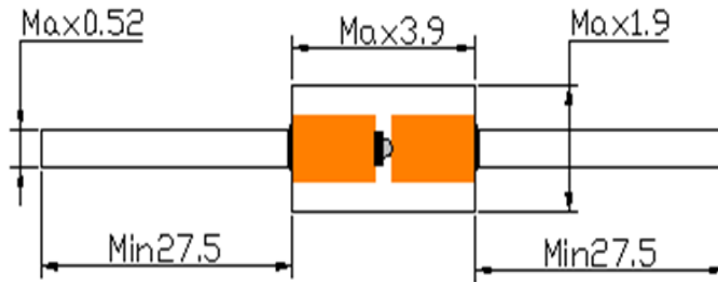


Package Outline Dimensions

in inches (millimeters)

DO-35 (DO-204AH)

CASE DIMENSION (DO-35 Type, 52mm), Unit: mm



Revision History

Document Version	Date of release	Description of changes
Rev.A	2021.06.01	Released Datasheet
Rev.B	2023.10.31	Modify document format

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