RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

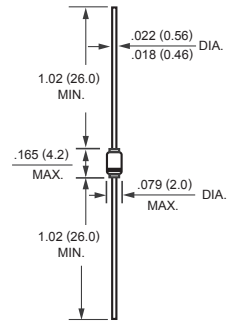
BAT42

SILICON PLANAR SCHOTTKY DIODES

FEATURES

* Fast Switching Device(T_{RR}<4.0nS)
* DO-35 Package (JEDEC)
* Through-Hole Device Type Mounting
* Hermetically Sealed Glass
* Compression Bonded Construction
* All external surfaces are corrosion resistant and leads are readily solderable

DO-35



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

MAXIMUM RATINGES (@ T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	BAT42	UNITS
Maximum Forward Comtinuous Reverse Voltage	V_R	30	V
Maximum Forward Comtinuous Current @ T_A=25°C	I_F	200	mAmps
Maximum Peak Forward Current @tp≤1s,d≤0.5	I_{FRM}	500	mAmps
Surge Forward Current @ tp≤10ms	I_{FSM}	4	Amps
Maximum Power Dissipation @ T_A=65°C	P_D	200	mW
Junction Temperature	T_J	125	°C
Storage Temperature Range	T_{STG}	-65 to + 150	°C

ELECTRICAL CHARACTERISTICS (@ T_A = 25°C unless otherwise noted)

CHARACTERISTICS	SYMBOL	MIN.	TYP.	MAX.	UNITS
Reverse breakdown voltage (I_R=100μA)	$V_{(BR)R}$	30	-	-	V
Reverse voltage leakage current (V_R=25V,T_J=25°C) (V_R=25V,T_J=100°C)	I_R	-	- -	0.5 100	μA
Forward voltage Pulse Tesx tp<300μs,δ<2% (I_F=10mA) (I_F=50mA) (I_F=200mA)	V_F	-	- - -	0.40 0.65 1.0	V
Diode capacitance (V_R=1,f=1MHz)	C_D	-	7.0	-	pF
Reveres recovery time (I_F=I_R=10mA,I_{RR}=1mA,R_L=100Ω)	t_{rr}	-	-	5	nS

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