

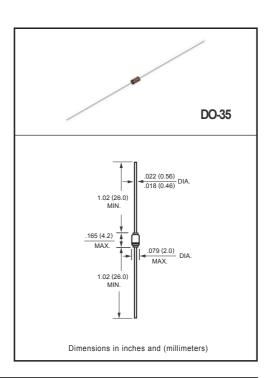
# SILICON PLANAR SCHOTTKY DIODES

### **FEATURES**

- \* Fast Switching Device(T<sub>RR</sub><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

### 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 ( a TA = 25°C unless otherwise noted )

RATINGS	SYMBOL	BAT42	UNITS
Maximum Forward Comtinuous Reverse Voltage	V <sub>R</sub>	30	٧
Maximum Forward Comtinuous Current @ T <sub>A</sub> =25°C	lF	200	mAmps
Maximum Peak Forward Current @tp<1s,d<0.5	I <sub>FRM</sub>	500	mAmps
Surge Forward Current @ tp≤10ms	I <sub>FSM</sub>	4	Amps
Maximum Power Dissipation @ T <sub>A</sub> =65°C	PD	200	mW
Junction Temperature	TJ	125	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to + 150	°C

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

CHARACTERISTICS	SYMBOL	MIN.	TYP.	MAX.	UNITS
Reverse breakdown voltage (I <sub>R</sub> =100μA)	V <sub>(BR)R</sub>	30	-	-	V
Reverse voltage leakage current (V <sub>R</sub> =25V,T <sub>J</sub> =25°C) (V <sub>R</sub> =25V,T <sub>J</sub> =100°C)	I <sub>R</sub>	-		0.5 100	μА
$\begin{array}{ccc} & (I_F = 10 mA) \\ \\ Forward \ voltage \ Pulse \ Tesx \ tp < 300 \mu s, \delta < 2\% & (I_F = 50 mA) \\ \\ & (I_F = 200 mA) \end{array}$	V <sub>F</sub>	-	- - -	0.40 0.65 1.0	V
Diode capacitance (V <sub>R</sub> =1,f=1MHz)	C <sub>D</sub>	-	7.0	-	pF
Reveres recovery time ( $I_F=I_R=10$ mA, $I_{RR}=1$ mA, $R_L=100\Omega$ )	t <sub>rr</sub>	-	-	5	nS

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