## **Silicon Switching Diode**

1N4454

## **DO-35 Glass Package**

# **Applications**

Used in general purpose applications, where performance and switching speed are important.

### **Features**

- Six sigma quality
- Metallurgically bonded
- BKC's Sigma Bond<sup>™</sup> plating for problem free solderability
- LL-34/35 MELF SMD available
- Full approval to Mil-S-19500 /144
- Available up to JANTXV-1 levels
- "S" level screening available to Source Control Drawings

DO-35 Glass Package (nominal dimensions)			
glass  1.0" Length  25.4 mm 0.145" (Min.) 3.7 mm	0.020° 0.50 mm Chip Dia. ** 0.070° 1.8 mm		

Maximum Ratings	Symbol	Value	Unit
Peak Inverse Voltage @ 5µA & 0.1µA @ -55°C	PIV	75 (Min.)	Volts
Average Rectified Current	l <sub>Avg</sub>	200	mAmps
Continuous Forward Current	I <sub>Fdc</sub>	300	mAmps
Peak Surge Current (t <sub>peak</sub> = 1 sec.)	peak	1.0	Amp
Power Dissipation T <sub>L</sub> = 50 °C, L = 3/8" from body	P <sub>tot</sub>	500	mWatts
Operating Temperature Range	T <sub>Op</sub>	-65 to +175	۰C
Storage Temperature Range	T <sub>St</sub>	-65 to +200	°C

Electrical Characteristics @ 25 °C	Symbol	Symbol Maximum Limits		
Forward Voltage Drop @ I <sub>F</sub> = 10 mA	V <sub>F</sub>	1.0 (1.2 @150 °C)	Volts	
Reverse Leakage Current @ V <sub>B</sub> = 50 V	I <sub>B</sub>	0.1 (100 @ 150 °C)	μA	
Capacitance @ V <sub>R</sub> = 0 V, f = 1mHz	C <sub>T</sub>	2.0	pF	
Reverse Recovery Time (note 1)	t <sub>rr</sub>	4.0	nSecs	
Forward Recovery Time (note 2)	V <sub>tr</sub>	30	nSecs	

Note 1: Per Method 4031 -B with  $I_F = I_B = 10$  mA,  $R_L = 100$  Ohms, C = 3 Pf.

Note 2: Per Method 4026 with  $I_r = 100$ mA,  $t_r < 0.4$  nS.

To order MIL parts, use the 1N4454-1 number with the appropriate JAN, JTX or JTXV prefix.

The SMD DO-213AA comes in both commercial (LL4454) and military versions (1N4454UR-1).



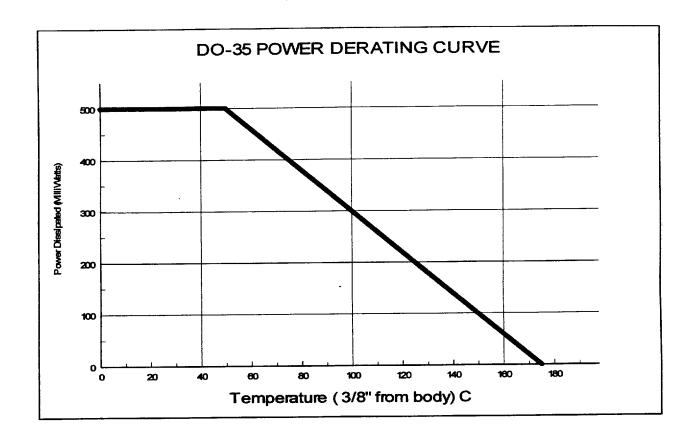
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# DO-35 DERATING (175 C Tj)





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