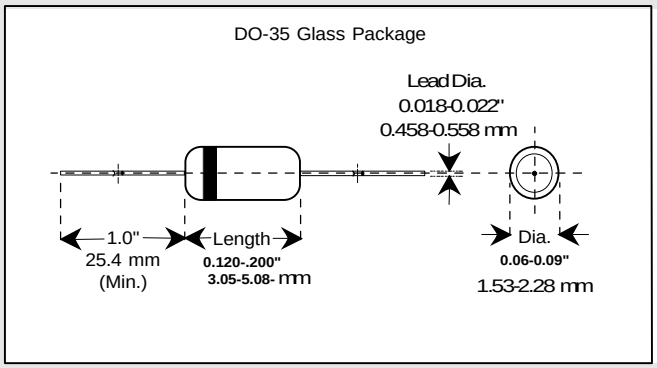
Silicon Switching Diode

1N4454, 1N4454-1

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™ 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

Maximum Ratings	**Symbol**	**Value**	**Unit**
Peak Inverse Voltage @ 5µA & 0.1µA @ -55°C	PIV	75 (Min.)	Volts
Average Rectified Current	I_{Avg}	200	mAmps
Continuous Forward Current	I_{Fdc}	300	mAmps
Peak Surge Current (t_{peak} = 1 sec.)	I_{peak}	1.0	Amp
Power Dissipation T_L = 50 °C, L = 3/8" from body	P_{tot}	500	mWatts
Operating Temperature Range	T_{Op}	200	° C
Storage Temperature Range	T_{St}	-65 to +200	° C
Electrical Characteristics @ 25°C*	**Symbol**	**Limits**	**Unit**
Forward Voltage @ I_F= 10 mA	V_F	1.0(max)	Volts
Breakdown Voltage @ I_R = 5 µA	PIV	75 (min)	Volts
Reverse Leakage Current @ V_R = 50 V	I_R	0.1 (max)	µA
Reverse Leakage Current @ V_R = 50 V, T=150 °C	I_R	100 (max)	µA
Capacitance @ V_R = 0 V, f = 1mHz	C_T	2.0 (max)	pF
Reverse Recovery Time (note 1)/(note 2)	t_{rr}	2.0/4.0 (max)	nSecs
Forward Recovery Voltage (note 3)	V_{fr}	3.0 (max)	Volts

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

Note 2: Per Method 4031-A with I_F = 10 mA, R_L = 100 Ohms, Vr = 6 V, Recover to 1.0 mA.

Note 3: Per Method 4026 with I_F = 100 mA, R_L = 50 Ohms,Peak Square wave ,100 nSec Pulse Width, tr<30 nSec,repetition Rate = 5 - 100 KHz.

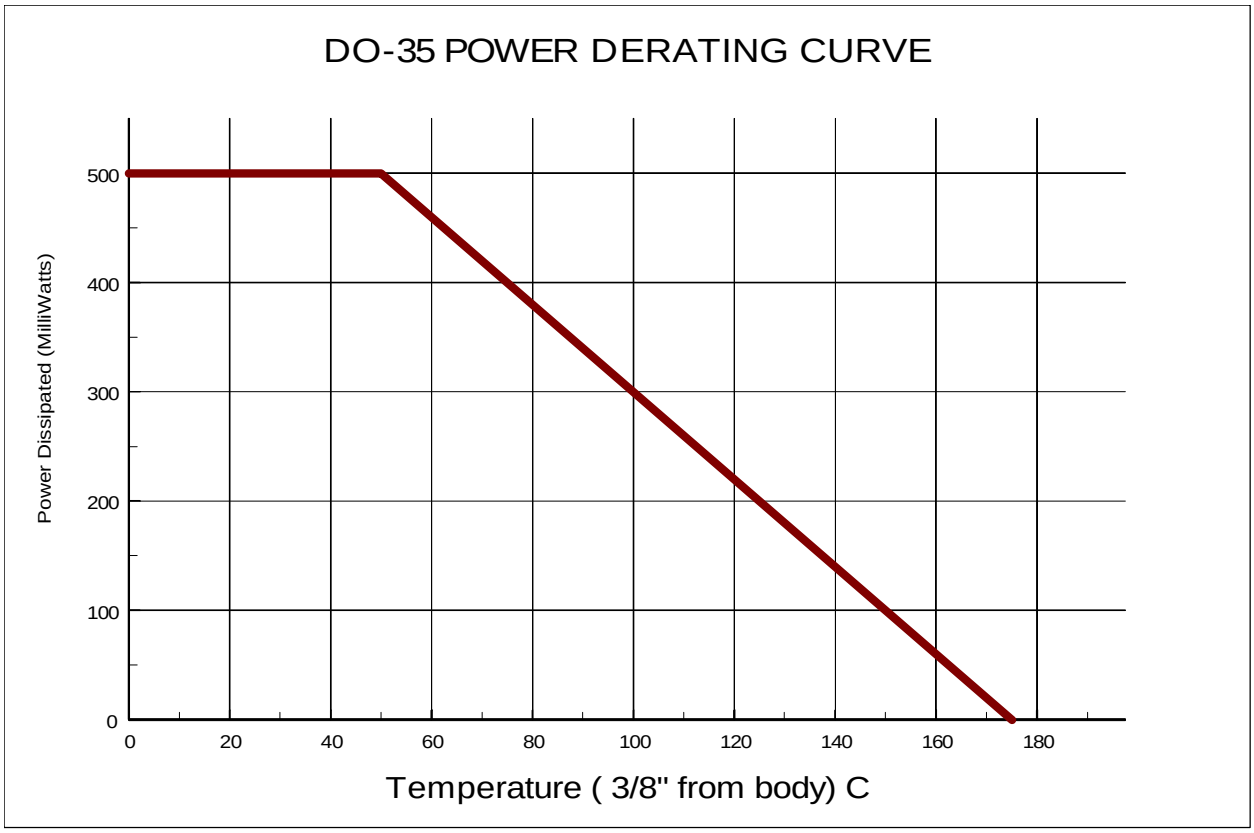
** Unless Otherwise Specified*

Microsemi

6 Lake Street - Lawrence, MA 01841

Tel: 978-681-0392 - Fax: 978-681-9135

DO-35 DERATING (175 C Tj)



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