

Silicon Switching Diode

1N4454,
1N4454-1

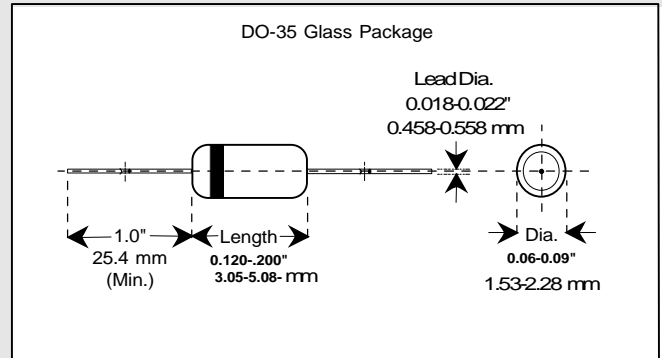
DO-35 Glass Package

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 @ 5 μ A & 0.1 μ A @ -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 μ A	PIV	75 (min)	Volts
Reverse Leakage Current @ V _R = 50 V	I _R	0.1 (max)	μ A
Reverse Leakage Current @ V _R = 50 V, T=150 °C	I _R	100 (max)	μ A
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, V_r = 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.

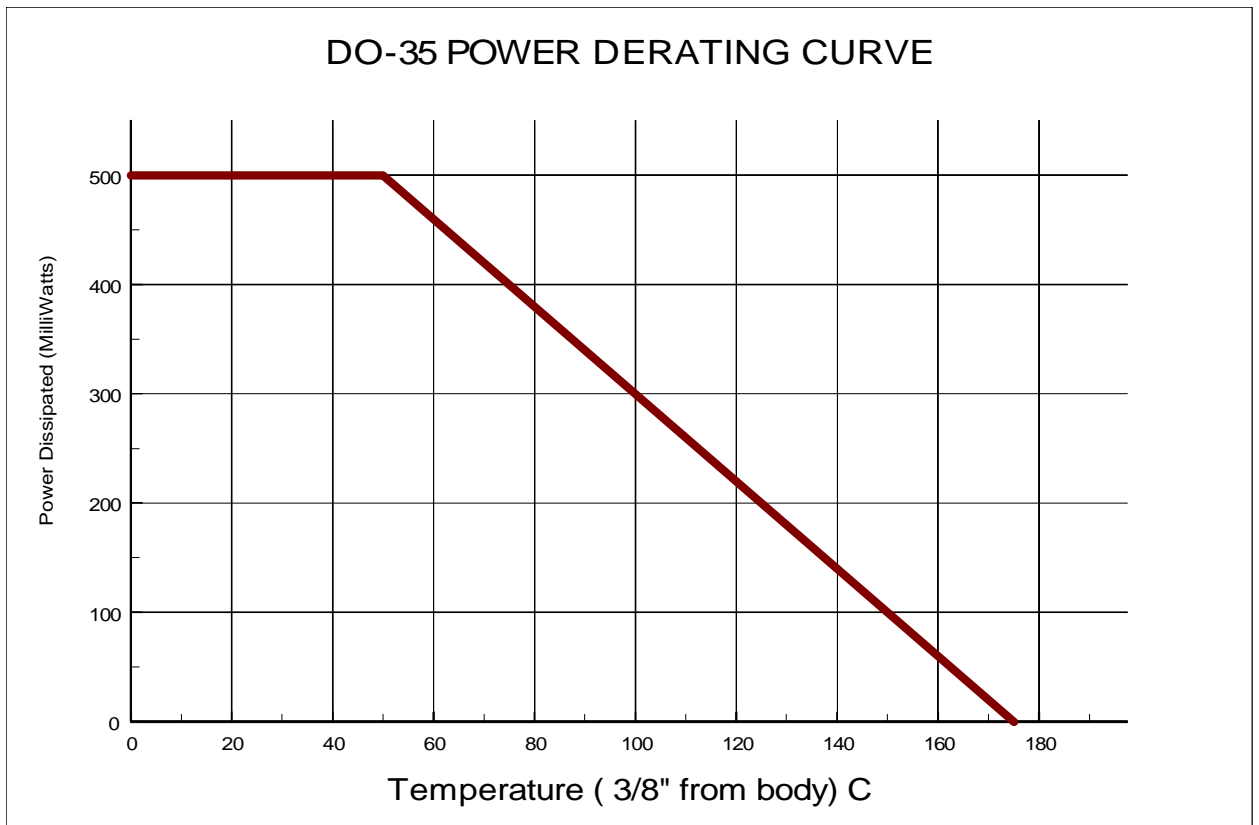
* Unless Otherwise Specified



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DO-35 DERATING (175 C Tj)



Microsemi

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