

MINI-MELF-SMD

1N4454UR-1

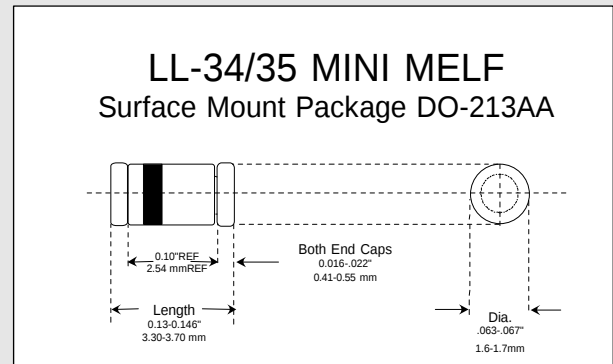
Silicon Switching Diode

Applications

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

Features

- Six sigma quality
- Metallurgically bonded
- BKC's Sigma Bond™ plating for problem free solderability
- Also comes in DO-35 glass package
- Full UR approval to Mil-S-19500 /144
- Available up to JANTXV 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 @ $I_R = 10$ mA	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, $f = 1$ MHz	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, $t_r < 30$ nSec, repetition Rate = 5 - 100 KHz. *Unless Otherwise Specified



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