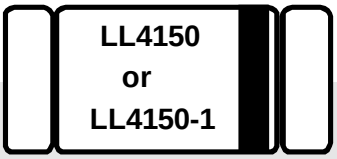
MINI-MELF-SMD



Silicon Diode

Applications

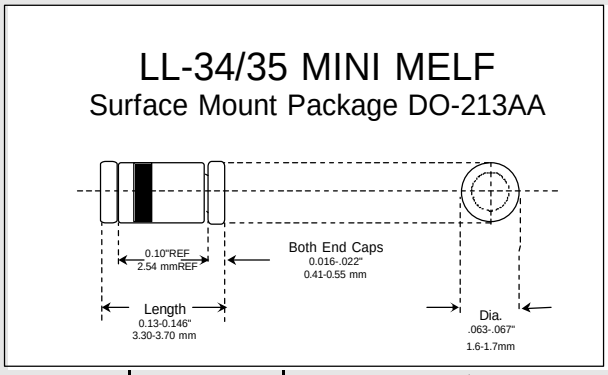
Switching

Used in general purpose applications, where a low current controlled forward characteristic and fast switching speed are important.

BKC can produce generic equivalents to JAN/ TX/ TXV and S level per MIL-S-19500/ 231 with internal source control drawings.

Features

- Six sigma quality
- Metallurgically bonded
- BKC's Sigma Bond™ plating for problem free solderability
- Available in DO-35 package



Maximum Ratings	Symbol	Value	Unit
Peak Inverse Voltage	PIV	75 (Min.)	Volts
Average Rectified Current	I_{Avg}	200	mAmps
Continuous Forward Current	I_{Fdc}	400	mAmps
Peak Surge Current (t_{peak} = 1 sec.)	I_{peak}	0.5	Amp
BKC Power Dissipation T_L=50 °C, L = 3/8" from body	P_{tot}	500	mWatts
Operating Temperature Range	T_{Op}	-65 to +200	° C
Storage Temperature Range	T_{St}	-65 to +200	° C

Electrical Characteristics @ 25°C	Symbol	Minimum	Maximum	Unit
Forward Voltage Drop @ I_F = 1.0 mA	V_F	0.54	0.62	Volts
Forward Voltage Drop @ I_F = 10 mA	V_F	0.66	0.74	Volts
Forward Voltage Drop @ I_F = 50 mA	V_F	0.76	0.86	Volts
Forward Voltage Drop @ I_F = 100 m	V_F	0.80	0.92	Volts
Forward Voltage Drop @ I_F = 200 mA	V_F	0.87	1.0	Volts
Reverse Leakage Current @ V_R = 50 V	I_R		0.1 (100 @ 150 °C)	µA
Breakdown Voltage @ Ir = 0.1 mA	PIV	75		Volts
Capacitance @ V_R = 0 V, f = 1mHz	C_T		2.5	pF
Reverse Recovery time (note 1)	t_{rr}		4.0	nSecs
Reverse Recovery time (note 2,3)	t_{rr}		6.0	nSecs
Forward Recovery time (note 4)	V_{fr}		10	nSecs

Note 1: Per Method 4031-A with $I_F = I_R$ = 10 to 200 mA, R_L = 100 Ohms,recover to 0.1 If.

Note 2: Per Method 4031-A with $I_F = I_R$ = 200 to 400 mA, R_L = 100 Ohms,recover to 0.1 If.

Note 3: Per Method 4031-A with I_F = 10 microA, Ir = 1.0 mA, recover to 0.1 mA.

Note 4: Per Method 4026 with I_F = 200 mA, Ir = 1.0 mA, recover to 0.1 mA.

Microsemi

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