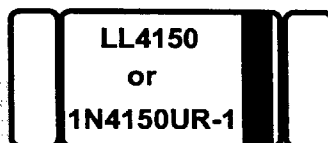


MINI-MELF-SMD

Applications



Silicon Diode Switching

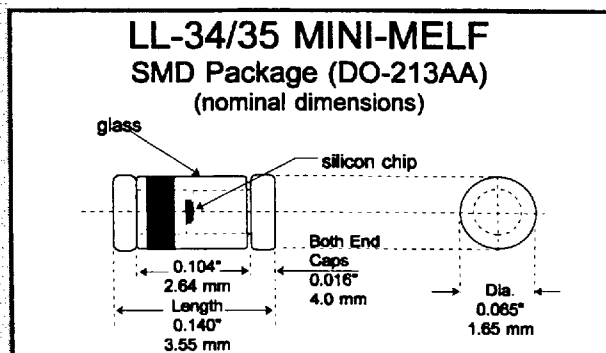
Used in general purpose applications, where a low current controlled forward characteristic and fast switching speed are important.

BKC can produce generic equivalents to JAN/ TX/ TXV and S level per MIL-S-19500/ 437 with internal source control drawings.

Use HR, HRX, HRV or HRS suffixes for cost effective high reliability parts.

Features

- Six sigma quality
- Metallurgically bonded
- BKC's Sigma Bond™ plating for problem free solderability
- Available in DO-35 package with approval to Mil-S-19500 / 437



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}	400	mAmps	
Peak Surge Current (t _{peak} = 1 Sec.)		I _{peak}	0.50	Amp	
Power Dissipation T _{End Cap} = 50 °C		P _{tot}	500	mWatts	
Operating and Storage Temperature Range		T _{Op & St}	-65 to +175	°C	
Electrical Characteristics @ 25 °C		Symbol	Minimum	Maximum	Unit
Forward Voltage Drop @ I _F = 100 μA		V _F	0.49	0.55	Volts
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 mA		V _F	0.82	0.92	Volts
Forward Voltage Drop @ I _F = 200 mA		V _F	0.87	1.00	Volts
Reverse Leakage Current @ V _R = 50 V		I _R		100	nA
Reverse Leakage Current @ V _R = 50 V		I _R		100 @ 150 °C	μA
Capacitance @ V _R = 0 V, f = 1mHz		C _T		2.5	pF
Reverse Recovery Time (note 1)		t _{rr}		4.0	nSecs

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

For equivalent MIL devices, use 1N4150UR-1 along with the appropriate HR, HRX, HRV or HRS suffix.

The SMD DO-213AA also comes in a commercial and a military DO-35 leaded version (1N4150).



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