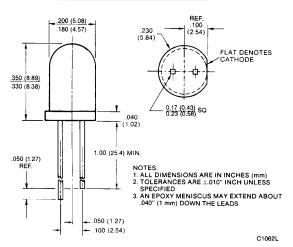




ORANGE MV5153/4A MV6153/4A YELLOW MV5353/4A MV6353/4A HIGH EFFICIENCY GREEN MV5453/4A MV64530/1 MV6454A HIGH EFFICIENCY RED MV5753/4A MV6753/4A

PACKAGE DIMENSIONS



DESCRIPTION

These solid state indicators offer a variety of diffused lens effects and color availability. The High Efficiency Red anc Yellow devices are made with gallium arsenide phosphide on gallium phosphide. The Green units are made with gallium phosphide on gallium phosphide. All devices are available with cathode long as MV5X5X, or with anode long as MV6X5X.

FEATURES

- High efficiency GaP light source with various lens effects
- Versatile mounting on PC board or panel
- Snap in grommet MP52 available as separate order item
- Long life—solid state reliability
- Low power requirements
- Compact, rugged, lightweight

CATHODE LONG	ANODE LONG	SOURCE COLOR	LENS TYPE	LENS EFFECT	APPLICATION
MV5153	MV6153	High Efficiency Red	Amber Diffused	Wide Beam	Direct View
MV5154A	MV6154A	High Efficiency Red	Amber Diffused	Narrow Beam	High Bright Direct View
MV5353	MV6353	Yellow	Yellow Diffused	Wide Beam	Direct View
MV5354A	MV6354A	Yellow	Yellow Diffused	Narrow Beam	High Bright Direct View
MV5453	MV64530/1	High Efficiency Green	Green Diffused	Wide Beam	Direct View
MV5454A	MV6454A	High Efficiency Green	Green Diffused	Narrow Beam	High Bright Direct View
MV5753	MV6753	High Efficiency Red	Red Diffused	Wide Beam	Direct View
MV5754A	MV6754A	High Efficiency Red	Red Diffused	Narrow Beam	High Bright Direct View



DIFFUSED T-13/4 SOLID STATE LAMPS

PARAMETER	TEST COND.	UNITS	6153 5153	6154A 5154A	6353 5353	6354A 5354A	64530 5453	64531	6454A 5454A	6753 5753	6754A 5754A
Forward voltage (V _F)											
typ.	$I_F=20 \text{ mA}$	V	2.0	2.0	2.1	2.1	2.2	2.2	2.2	2.0	2.0
max.	$I_F=20 \text{ mA}$	V	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Luminous Intensity											
min.	$I_F=20 \text{ mA}$	mcd	3.0	10.0	2.5	10.0	3.0	7.0	10.0	3.0	10.0
typ.	$I_F=20 \text{ mA}$	mcd	15	25	15	25	20	20	30	15	25
Peak wavelength	I _F =20 mA	nm	635	635	585	585	562	562	562	635	635
Spectral line half width	I _F =20 mA	nm	45	45	35	35	30	30	30	45	45
Capacitance	- 213										
typ.	V=0, f=1 MHz	рF	45	45	45	45	20	20	20	45	45
Reverse voltage (V _R)											
min.	$I_{R} = 100 \ \mu A$	V	5	5	5	5	5	5	5	5	5
Reverse current (I _R)					•				-		
max.	$V_R=5.0 V$	μA	100	100	100	100	100	100	100	100	100
Viewing angle (total)	See Fig. 3	degrees	65	24	65	24	75	75	24	65	24

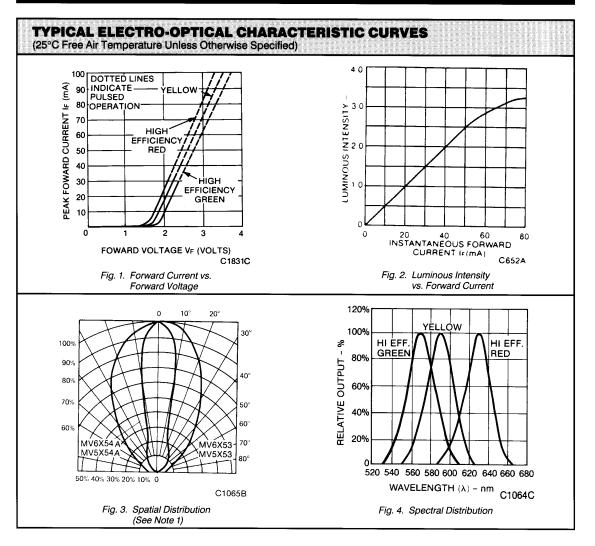
	YELLOW	H.E. RED, ORANGE	GREEN
Power dissipation at 25°C ambient	85 mW	120 mW	120 mW
Derate linearly from 25°C (MVX453/4A from 50°C)		1.6 mW/°C	1.6 mW/°C
Storage and operating temperatures	-55°C to +100°C	-55°C to +100°C	-55°C to +100°C
_ead soldering time at 260°C (See Note 2)	5 sec.	5 sec.	5 sec.
Continuous forward current at 25°C	20 mA	35 mA	30 mA
Peak forward current (1 μ sec pulse, 0.3% duty cycle)		1.0 A	90 mA
Reverse voltage	5.0 V	5.0 V	5.0 V

NOTES

- The axis of spatial distribution are typically within a 10° cone with reference to the central axis of the device.
 The leads of the device were immersed in molten solder, at 260°C, to a point 1/16 inch (1.6 mm) from the bodyof the device per MIL-S-750, with a dwell time of 5 seconds.









DIFFUSED T-1 3/4 SOLID STATE LAMPS

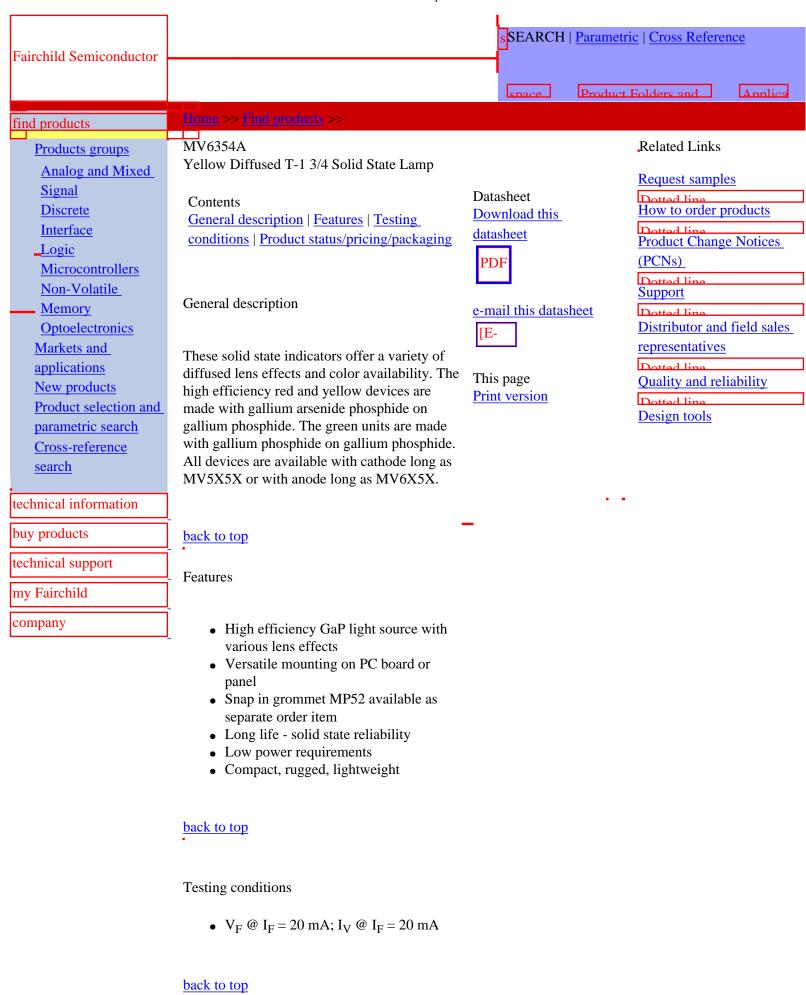
DISCLAIMER

FAIRCHILD SEMICONDUCTOR RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

LIFE SUPPORT POLICY

FAIRCHILD'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE PRESIDENT OF FAIRCHILD SEMICONDUCTOR CORPORATION. As used herein:

- Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
- A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

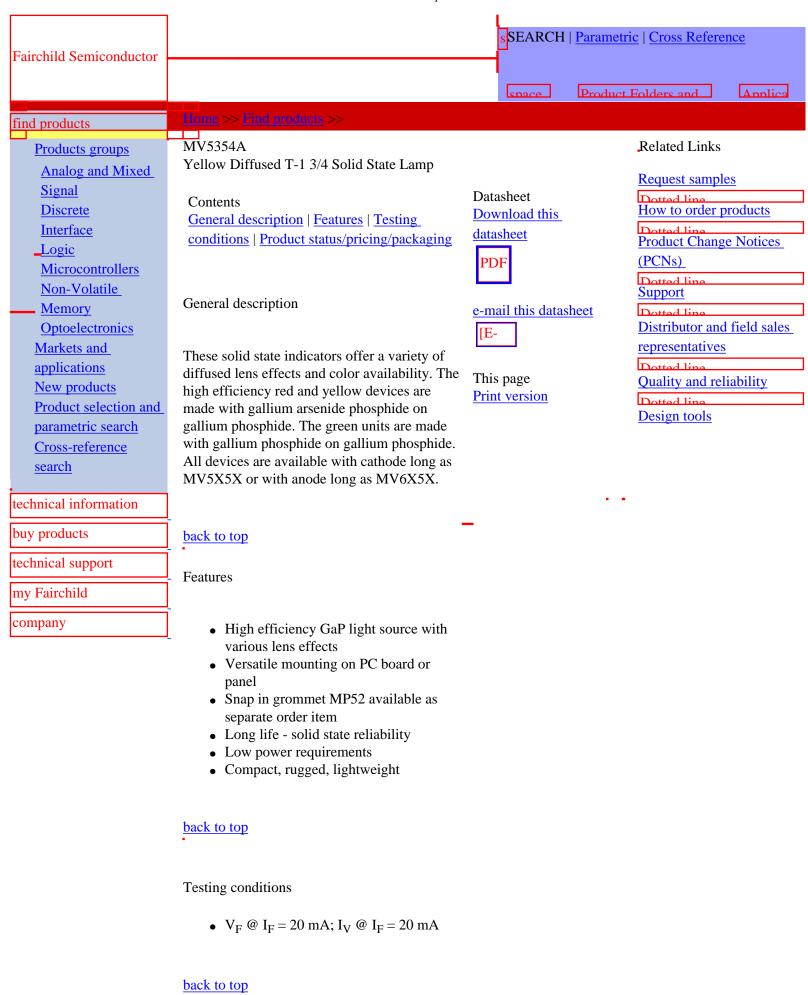


Product	Product status	Pricing*	Package type	Packing method
MV6354A.A5R0	Full Production	\$0.058	T-1 3/4	TAPE REEL
MV6354A	Full Production	\$0.051	T-1 3/4	BULK

^{* 1,000} piece Budgetary Pricing

back to top

<u>Home</u> | <u>Find products</u> | <u>Technical information</u> | <u>Buy products</u> | <u>Support</u> | <u>Company</u> | <u>Contact us</u> | <u>Site index</u> | <u>Privacy policy</u>

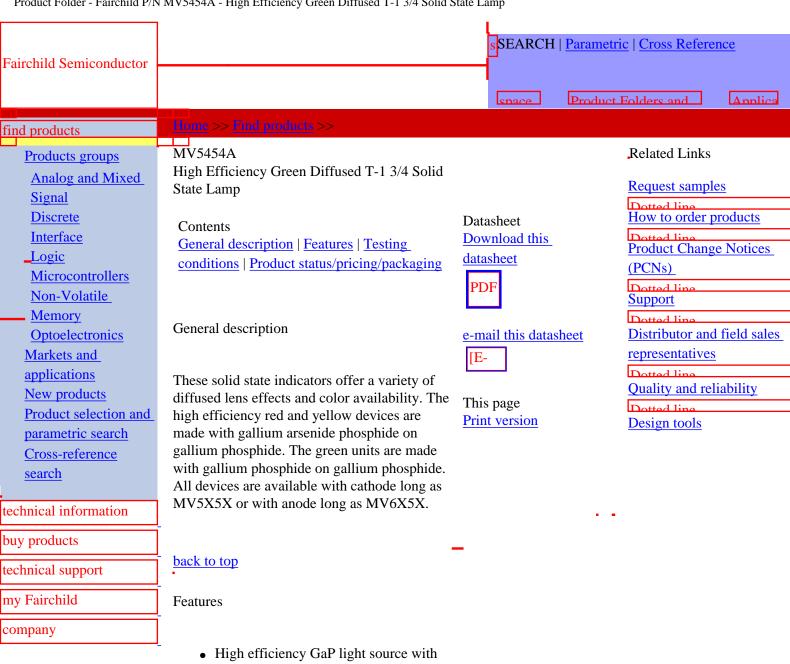


Product	Product status	Pricing*	Package type	Packing method
MV5354A.B4R0	Full Production	\$0.058	T-1 3/4	TAPE REEL
MV5354A.A4A0	Full Production	\$0.058	T-1 3/4	AMMO
MV5354A	Full Production	\$0.051	T-1 3/4	BULK

^{* 1,000} piece Budgetary Pricing

back to top

<u>Home</u> | <u>Find products</u> | <u>Technical information</u> | <u>Buy products</u> | <u>Support</u> | <u>Company</u> | <u>Contact us</u> | <u>Site index</u> | <u>Privacy policy</u>



- various lens effects
- Versatile mounting on PC board or
- Snap in grommet MP52 available as separate order item
- Long life solid state reliability
- Low power requirements
- Compact, rugged, lightweight

Testing conditions

• $V_F @ I_F = 20 \text{ mA}$; $I_V @ I_F = 20 \text{ mA}$

Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Packing method
MV5454A	Full Production	\$0.051	T-1 3/4	BULK
MV5454A.A4A0	Full Production	\$0.058	T-1 3/4	AMMO
MV5454A.B4R0	Full Production	\$0.058	T-1 3/4	TAPE REEL

^{* 1,000} piece Budgetary Pricing

back to top

<u>Home</u> | <u>Find products</u> | <u>Technical information</u> | <u>Buy products</u> | <u>Support</u> | <u>Company</u> | <u>Contact us</u> | <u>Site index</u> | <u>Privacy policy</u>

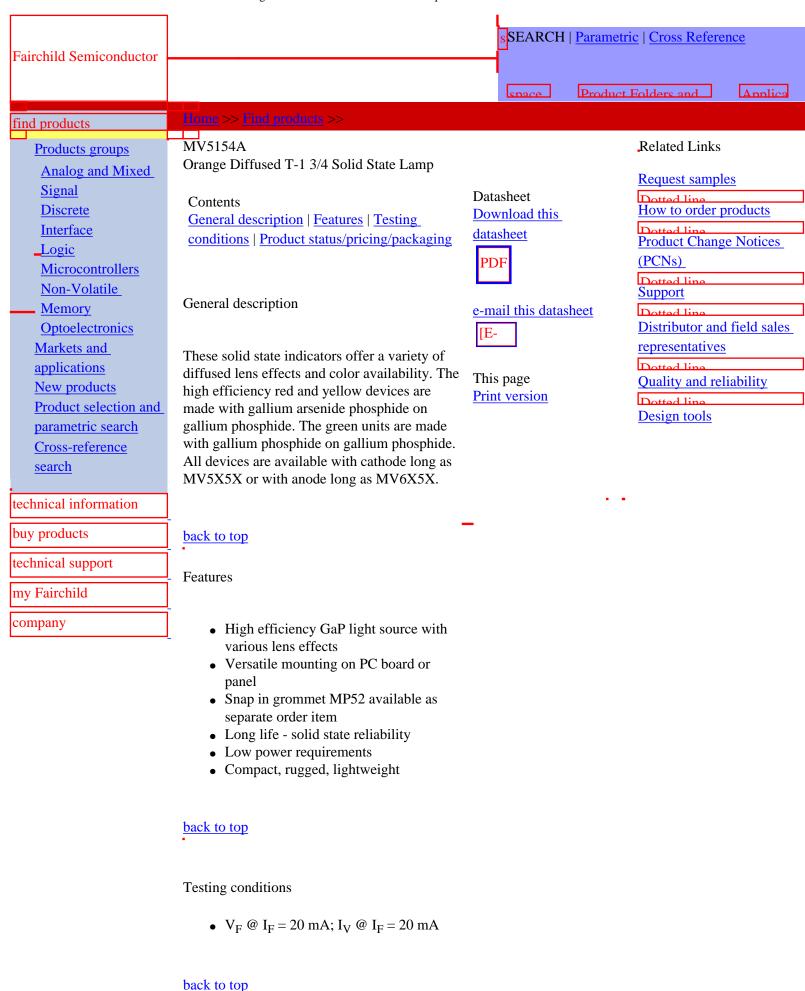


Product	Product status	Pricing*	Package type	Packing method
MV6353.A5R0	Full Production	\$0.058	T-1 3/4	TAPE REEL
MV6353.A5R2	Full Production	N/A	T-1 3/4	TAPE REEL
MV6353.B4R0	Full Production	\$0.058	T-1 3/4	TAPE REEL
MV6353.C5A0	Full Production	\$0.058	T-1 3/4	AMMO
MV6353.A4A0	Full Production	\$0.058	T-1 3/4	AMMO
MV6353.A4R0	Full Production	\$0.058	T-1 3/4	TAPE REEL
MV6353.A5A0	Full Production	\$0.058	T-1 3/4	AMMO
MV6353.A6R0	Full Production	\$0.058	T-1 3/4	TAPE REEL
MV6353	Full Production	\$0.051	T-1 3/4	BULK

^{* 1,000} piece Budgetary Pricing

back to top

<u>Home</u> | <u>Find products</u> | <u>Technical information</u> | <u>Buy products</u> | <u>Support</u> | <u>Company</u> | <u>Contact us</u> | <u>Site index</u> | <u>Privacy policy</u>



Product	Product status	Pricing*	Package type	Packing method
MV5154A	Full Production	\$0.051	T-1 3/4	BULK
MV5154A.A4A0	Full Production	\$0.058	T-1 3/4	TAPE REEL

^{* 1,000} piece Budgetary Pricing

back to top

<u>Home</u> | <u>Find products</u> | <u>Technical information</u> | <u>Buy products</u> | <u>Support</u> | <u>Company</u> | <u>Contact us</u> | <u>Site index</u> | <u>Privacy policy</u>



Testing conditions

• $V_F @ I_F = 20 \text{ mA}$; $I_V @ I_F = 20 \text{ mA}$

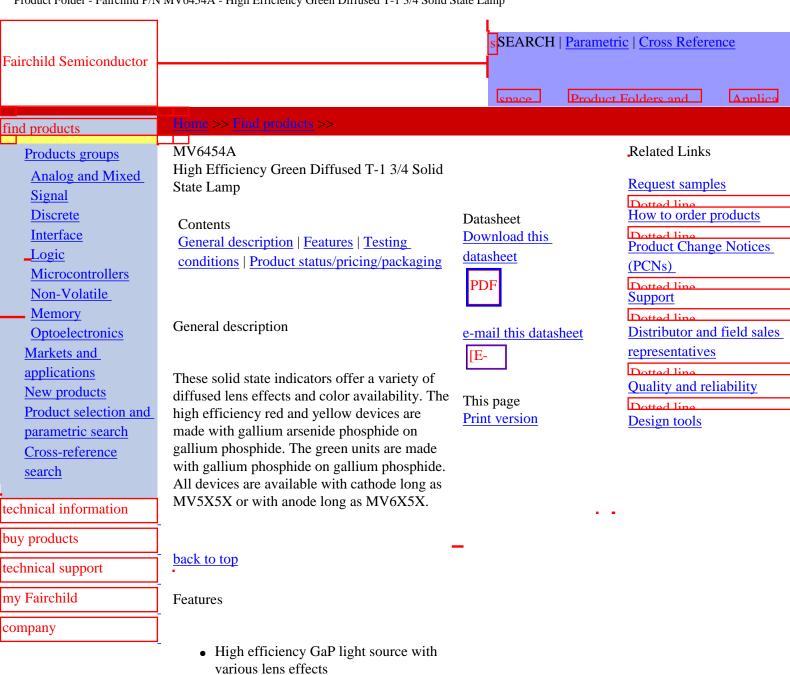
Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Packing method
MV64530.A4R0	Full Production	\$0.058	T-1 3/4	TAPE REEL
MV64530.A3R0	Full Production	\$0.058	T-1 3/4	TAPE REEL
MV64530.A4A0	Full Production	\$0.058	T-1 3/4	AMMO
MV64530.A5R0	Full Production	\$0.058	T-1 3/4	TAPE REEL
MV64530.A5A0	Full Production	\$0.058	T-1 3/4	AMMO
MV64530E.A6R0	Full Production	\$0.058	T-1 3/4	TAPE REEL
MV64530.B4A0	Full Production	\$0.058	T-1 3/4	AMMO
MV64530.B4A2	Full Production	N/A	T-1 3/4	AMMO
MV64530	Full Production	\$0.051	T-1 3/4	BULK
MV64530.A5R2	Full Production	N/A	T-1 3/4	TAPE REEL
MV64530.A6R0	Full Production	\$0.058	T-1 3/4	TAPE REEL

^{* 1,000} piece Budgetary Pricing

 $\underline{back\ to\ top}$

<u>Home</u> | <u>Find products</u> | <u>Technical information</u> | <u>Buy products</u> | <u>Support</u> | <u>Company</u> | <u>Contact us</u> | <u>Site index</u> | <u>Privacy policy</u>



- Versatile mounting on PC board or panel
- Snap in grommet MP52 available as separate order item
- Long life solid state reliability
- Low power requirements
- Compact, rugged, lightweight

Testing conditions

• $V_F @ I_F = 20 \text{ mA}$; $I_V @ I_F = 20 \text{ mA}$

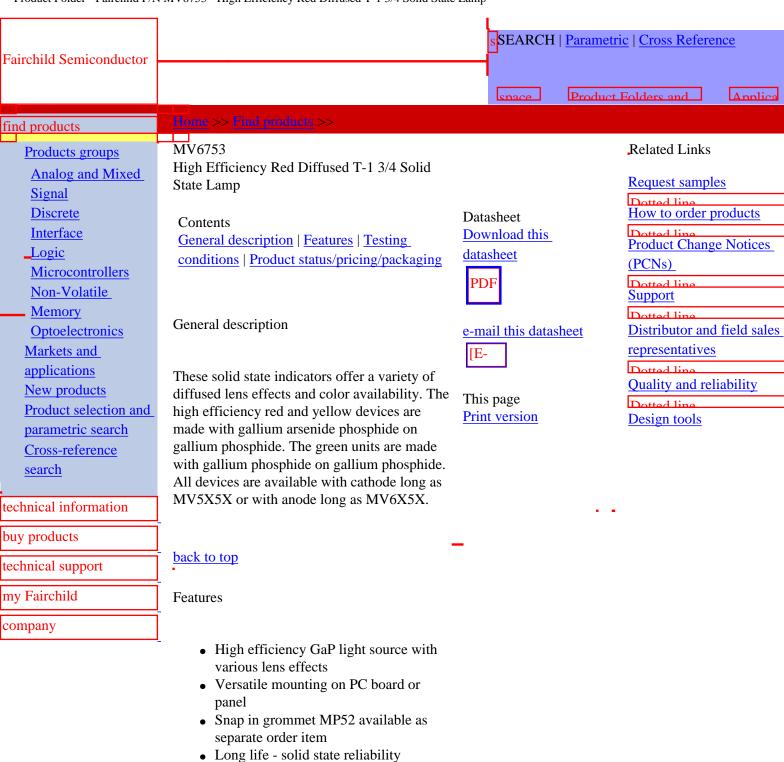
Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Packing method
MV6454A	Full Production	\$0.051	T-1 3/4	BULK
MV6454A.A4A0	Full Production	\$0.058	T-1 3/4	AMMO

^{* 1,000} piece Budgetary Pricing

back to top

<u>Home</u> | <u>Find products</u> | <u>Technical information</u> | <u>Buy products</u> | <u>Support</u> | <u>Company</u> | <u>Contact us</u> | <u>Site index</u> | <u>Privacy policy</u>



Testing conditions

• $V_F @ I_F = 20 \text{ mA}$; $I_V @ I_F = 20 \text{ mA}$

Low power requirementsCompact, rugged, lightweight

Product status/pricing/packaging

Product	Product status	Pricing*	Package type	Packing method
MV6753.A1A0	Full Production	\$0.058	T-1 3/4	AMMO
MV6753.A4A0	Full Production	\$0.058	T-1 3/4	AMMO
MV6753.A5R0	Full Production	\$0.058	T-1 3/4	TAPE REEL
MV6753.A4A2	Full Production	N/A	T-1 3/4	AMMO
MV6753.A3R0	Full Production	\$0.058	T-1 3/4	TAPE REEL
MV6753.A4R0	Full Production	\$0.058	T-1 3/4	TAPE REEL
MV6753.B4A0	Full Production	\$0.058	T-1 3/4	AMMO
MV6753E.A6R0	Full Production	\$0.058	T-1 3/4	TAPE REEL
MV6753.A5A2	Full Production	N/A	T-1 3/4	AMMO
MV6753.A6A0	Full Production	\$0.058	T-1 3/4	AMMO
MV6753	Full Production	\$0.051	T-1 3/4	BULK
MV6753.A2R0	Full Production	\$0.058	T-1 3/4	TAPE REEL
MV6753.B4A2	Full Production	N/A	T-1 3/4	AMMO
MV6753.A6R0	Full Production	\$0.058	T-1 3/4	TAPE REEL

^{* 1,000} piece Budgetary Pricing

back to top

<u>Home</u> | <u>Find products</u> | <u>Technical information</u> | <u>Buy products</u> | <u>Support</u> | <u>Company</u> | <u>Contact us</u> | <u>Site index</u> | <u>Privacy policy</u>