

VTS-1 Process Photodiodes

VTS __ 64, __ 65

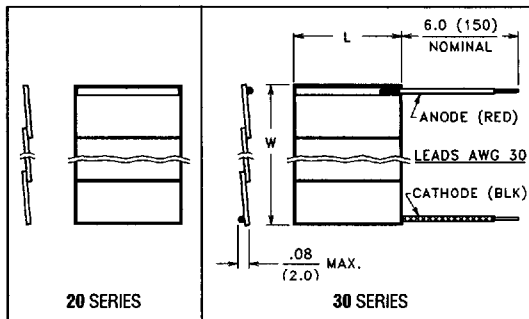
E G & G VACTEC

T-41-51

PRODUCT DESCRIPTION

Five cell arrays of large area planar silicon photodiodes primarily intended for use in the photovoltaic mode. These devices have low series resistance, moderate shunt resistance and high open circuit voltage at nominal light levels for use in power conversion and battery charging applications. Cells have solderable contacts and are available with or without flexible flying leads. Devices with leads are acrylic (plastic) coated.

PACKAGE DIMENSIONS inch (mm)



CASE 45

ANODE (ACTIVE) SURFACE SHOWN
CATHODE IS BACKSIDE

ABSOLUTE MAXIMUM RATINGS

Storage Temperature:

-40°C to 150°C Series 20

-40°C to 105°C Series 30

Operating Temperature:

-40°C to 125°C Series 20

-40°C to 105°C Series 30

DIMENSIONS	VTS __ 64	VTS __ 65
L	.400 (10.16)	.800 (20.32)
W	.800 (20.32)	.840 (21.34)
ACTIVE AREA	.33 ² (210 ²)	.65 ² (420 ²)

ELECTRO-OPTICAL CHARACTERISTICS @ 25°C (See also VTS-1 curves, page 75)

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	VTS __ 64			VTS __ 65			UNITS
			Min.	Typ.	Max.	Min.	Typ.	Max.	
I _{sc}	Short Circuit Current	H = 100 fc, 2850 K		240			500		μA
TC I _{sc}	I _{sc} Temp. Coefficient	2850 K		.20			.20		%/°C
I _{sc}	Short Circuit Current	H = 100 mW/cm ²	8.4			17			mA
V _{oc}	Open Circuit Voltage	H = 100 fc, 2850 K		2.25			2.25		V
V _{oc}	Open Circuit Voltage	H = 100 mW/cm ²		2.85			2.85		V
TC V _{oc}	V _{oc} Temp. Coefficient	2850 K		-10			-10		%/°C
C _J	Junction Capacitance	H = 0, V = 0 V		2.2			4.4		nF
λ _{range}	Spectral Application Range		400		1050	400		1050	nm
λ _p	Spectral Response - Peak			875			875		nm
S _R	Sensitivity	@ Peak		.51			.51		A/W