R3000 THRU R5000

200mA 3000V~5000V--High voltage silicon rectifier diode

HVGT high voltage silicon rectifier diodes is made of high quality glass passivated chip and high reliability epoxy resin sealing structure, and through professional testing equipment inspection qualified after to customers.

FEATURES:

1. Low cost .
2. Low leakage .
3. Low forward voltage drop .
4. Conform to RoHS.
5. High current capability.

APPLICATIONS:

1. High voltage multiplier circuit
2. Electrostatic generator circuit .
3. General purpose high voltage rectifier.
4. Other.

MECHANICAL DATA:

Case: JEDEC DO-15 molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

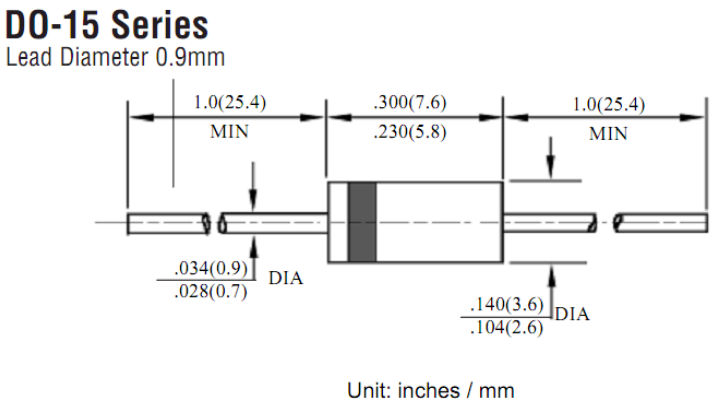
Mounting Position: Any.

Weight:0.014 ounce, 0.40 grams.

SHAPE DISPLAY:



SIZE: (Unit:mm) **HVGT NAME: DO-15**



MAXIMUM RATINGS AND CHARACTERISTICS: **(**@ T_A= 25°C unless otherwise specified)

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbols	R3000	R4000	R5000	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	3000	4000	5000	V
RMS Reverse Voltage	$V_{R(RSM)}$	2100	2800	3500	V
Average Output Current (Note 1) @ T_L = 50°C	I_O	200			mA
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30			A
Forward Voltage @ I_F= 200mA	V_{FM}	4.0	5.0		V
Peak Reverse Leakage Current at Rated DC Blocking Voltage	I_{RM}	5.0			uA
Typical Junction Capacitance (Note 2)	C_J	30			pF
Typical Thermal Resistance Junction to Ambient	$R_{\Theta JA}$	117			K/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150			°C

Notes: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

Fig 1

TYPICAL FORWARD CURRENT DERATING CURVE

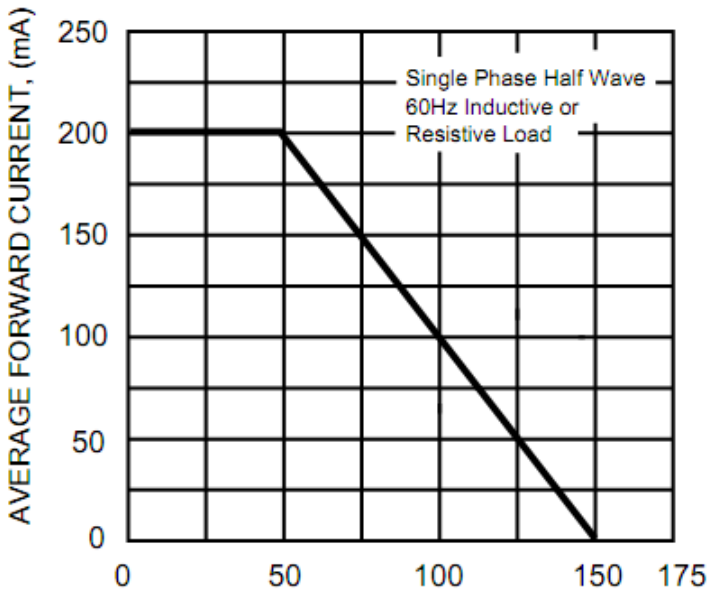


Fig 2

MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

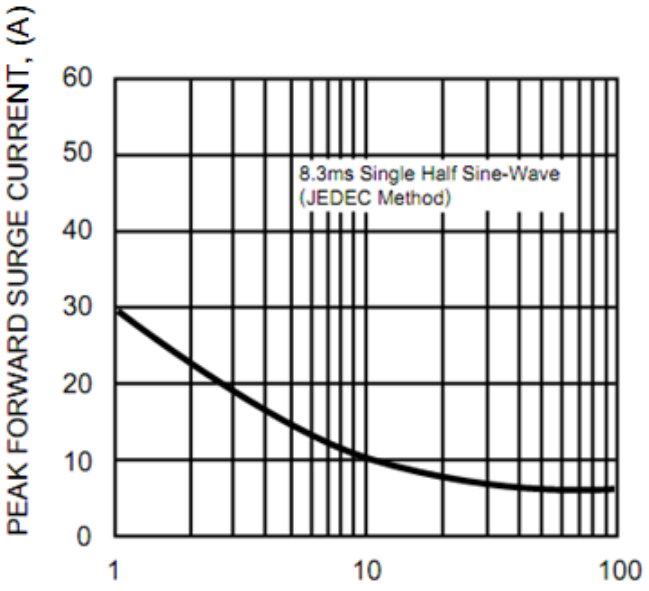


Fig 3

TYPICAL REVERSE CHARACTERISTICS

