

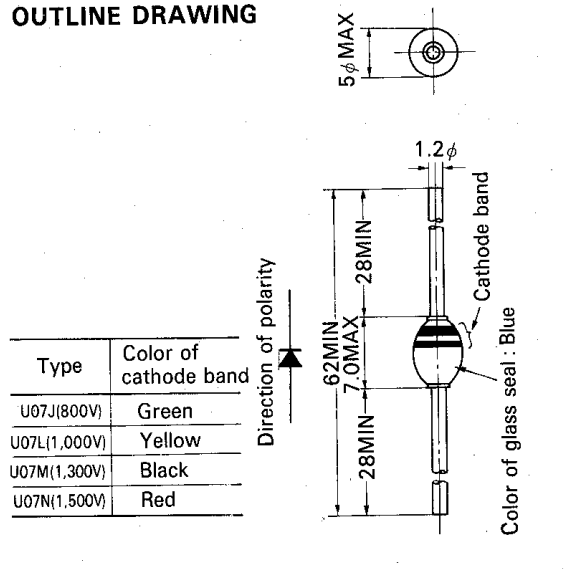
FEATURES

- U07 is a device developed for switching applications, with a reverse recovery time of $0.8\mu\text{sec}$. This product is optimum for use in high-frequency circuits such as television horizontal deflection circuits.
- Employing Hitachi's unique glass encapsulation that gained high reputation in V03/V06, U07 has a dual heat sink construction to achieve a small and lightweight structure with an increased current capacity.
- The silicon surface is stabilized directly with glass so as to attain excellent proofness against moisture and heat.

特長

- この製品は逆回復時間を、 $0.8\mu\text{sec}$ に押え、スイッチング用として開発した素子で、テレビの水平偏向回路等、高周波回路に最適です。
- 構造はV03/V06で好評の日立独自のガラスボディを採用、両面接着構造により小型、軽量で電流容量が向上しています。
- シリコンの表面安定を直接ガラスにて行なっていますので、耐湿性、耐熱性にすぐれています。

OUTLINE DRAWING



MAXIMUM ALLOWABLE RATINGS

Hitachi Type			U07J	U07L	U07M	U07N
EIAJ No.			1S2592	1S2593	1S2594	1S2595
Repetitive Peak Reverse Voltage	V_{RRM}	V	800	1,000	1,300	1,500
Non-repetitive Peak Reverse Voltage	V_{RSM}	V	1,000	1,300	1,600	1,800
Average Forward Current	I_o	A	1.0 (Single-phase, half-wave 180° conduction, ambient temperature 40°C)			
Peak One-Cycle Surge Current	I_{TSM}	A	80 (10msec conduction, sine half-wave cycle, no load) 60 (10msec conduction, sine half-wave cycle, full load)			
I^2t Limit Value	I^2t	$A^2\text{sec}$	15 (Time=2~10msec, I=RMS value)			
Operating Temperature	T_j	°C	-40~+140			
Storage Temperature	T_{stg}	°C	-40~+165			
Weight		g	1.0			

CHARACTERISTICS

Items	Symbols	Units	Ratings
Maximum Reverse Current	I_{RM}		—
Maximum Forward Voltage Drop	V_{FM}	V	2.3 (Single-Phase, Half-Wave Peak Value 3.0A, Conduction Angle 180° $T_j=25^\circ\text{C}$)
Reverse recovery time	t_{rr}	μsec	0.8MAX ($T_j=25^\circ\text{C}$, Measuring conditions are based on test circuit)
Thermal Resistance	R_{th}	°C/W	— (Junction To Air)