TYPE U07

UP TO 1500V 1.6A(RMS)
HIGH SPEED TYPE DIODE

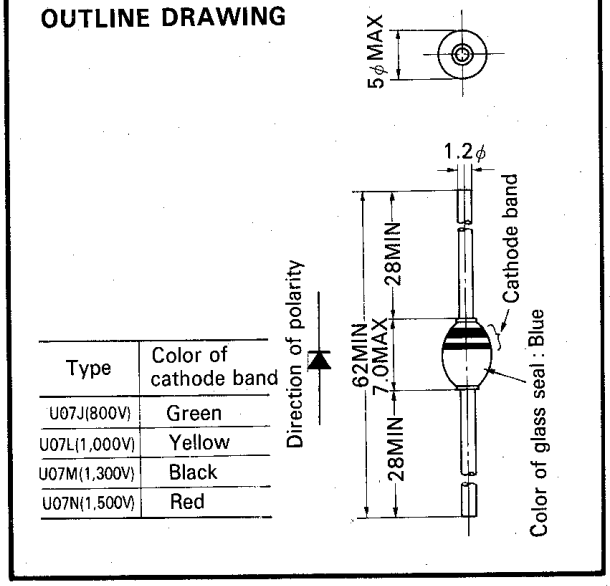
■FEATURES

- U07 is a device developed for switching applications, with a reverse recovery time of 0.8μsec. 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 repute 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,0.8μsec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



Type	Color of cathode band
U07J(800V)	Green
U07L(1,000V)	Yellow
U07M(1,300V)	Black
U07N(1,500V)	Red

■MAXIMUM ALLOWABLE RATINGS

Items \ Hitachi Type / EIAJ No.	Symbols	Units	U07J / 1S2592	U07L / 1S2593	U07M / 1S2594	U07N / 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 Currrent	Io	A	1.0 (Single-phase, half-wave 180° conduction, ambient temperature 40℃)			
Peak One-Cycle Surge Current	I_{TSM}	A	80 (10msec conduction, sine half-wave 1cycle, no load)			
			60 (10msec conduction, sine half-wave 1cycle, full load)			
I^2t Limit Value	I^2t	A^2sec	15 (Time=2~10msec, I=RMS value)			
Operating Temperature	T_j	℃	−40~+140			
Storage Temperature	T_{stg}	℃	−40~+165			
Weight		g	1.0			

■CHARACTERISTICS

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