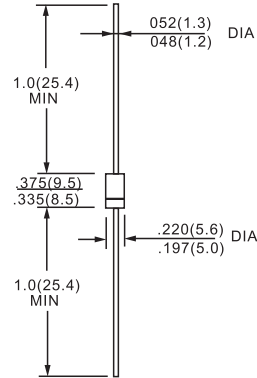




FEATURES

- High efficiency
- Low power losses
- Very low switching losses
- Low reverse current
- High surge capability

DO-27



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

ABSOLUTE MAXIMUM RATINGS (limiting values)

Symbol	Parameter	Value	Unit
I_{FRM}	Repetive Peak Forward Current	$t_p \leq 20\mu s$	A
$I_{F(AV)}$	Average Forward Current *	$T_a = 55^\circ C$ $\delta = 0.5$	A
I_{FSM}	Surge non Repetitive Forward Current	$t_p = 10ms$ Sinusoidal	A
P_{tot}	Power Dissipation *	$T_a = 55^\circ C$	W
T_{stg} T_j	Storage and Junction Temperature Range	- 40 to + 150 - 40 to + 150	$^\circ C$
T_L	Maximum Lead Temperature for Soldering during 10s at 4mm from Case	230	$^\circ C$

Symbol	Parameter	BYT 13-			Unit
		600	800	1000	
V_{RRM}	Repetitive Peak Reverse Voltage	600	800	1000	V

THERMAL RESISTANCE

Symbol	Parameter	Value	Unit
$R_{th(j-a)}$	Junction-ambient*	25	$^\circ C/W$

STATIC CHARACTERISTICS

Synbol	Test Conditions	Min.	Typ.	Max.	Unit
I_R	$T_j = 25^\circ C$ $V_R = V_{RRM}$			20	μA
V_F	$T_j = 25^\circ C$ $I_F = 3A$			1.3	V



RATINGS AND CHARACTERISTIC CURVES

BYT13-600 THRU BYT13-1000

Figure 1. Maximum average power dissipation versus average forward current.

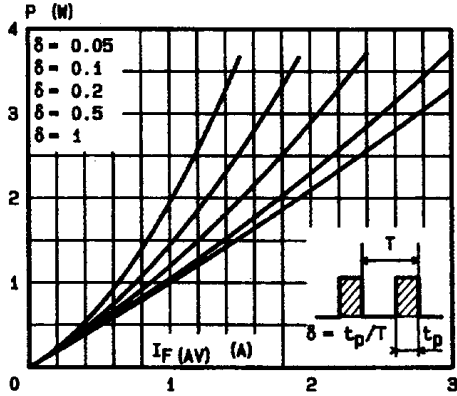


Figure 2. Average forward current versus ambient temperature.

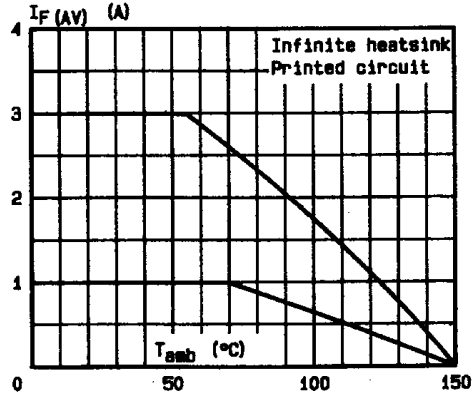


Figure 3. Thermal resistance versus lead length.

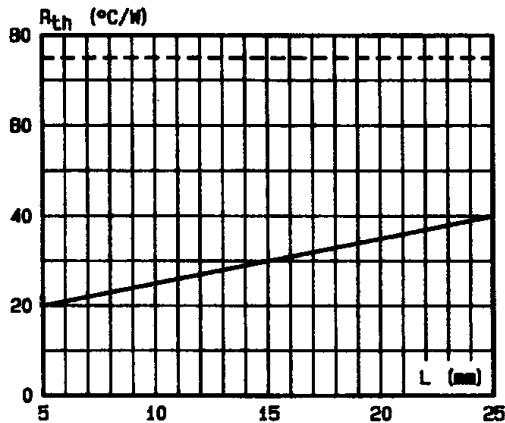


Figure 5. Peak forward current versus peak forward voltage drop (maximum values).

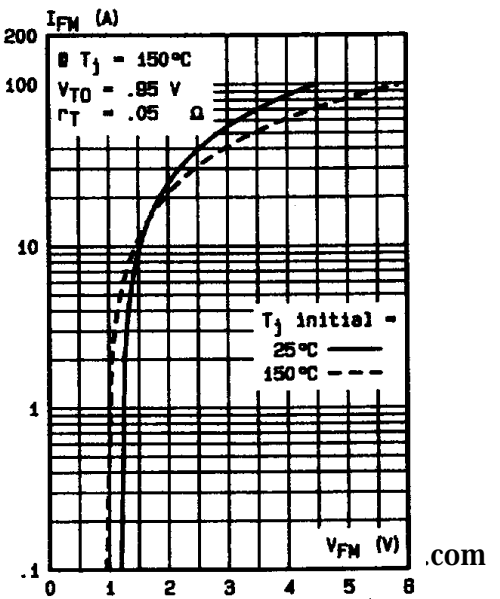


Figure 4. Transient thermal impedance junction-ambient for mounting n°2 versus pulse duration (L = 10 mm).

