BYW27-50 - BYW27-1000 SILICON RECTIFIERS

PRV : 50 - 1000 Volts
Io : 1.0 Amperes

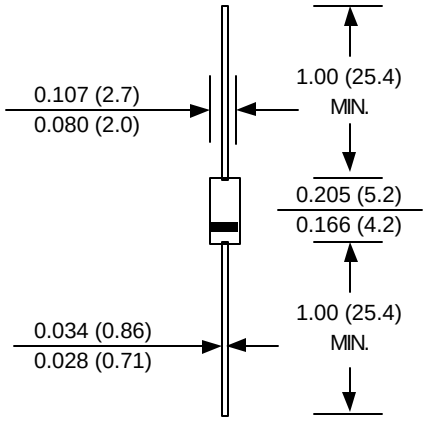
FEATURES :

* High current capability
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop

MECHANICAL DATA :

* Case : DO-41 Molded plastic
* Epoxy : UL94V-O rate flame retardant
* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
* Polarity : Color band denotes cathode end
* Mounting position : Any
* Weight : 0.339 gram

DO - 41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	BYW 27-50	BYW 27-100	BYW 27-200	BYW 27-400	BYW 27-600	BYW 27-800	BYW 27-100	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 70°C	I_F	1.0							Amp.
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	50							Amps.
Maximum Forward Voltage at I_F = 1.0 Amp.	V_F	1.0							Volts
Maximum DC Reverse Current Ta = 25 °C	I_R	0.2							µA
at rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	25							µA
Typical Junction Capacitance (Note1)	C_J	30							pF
Typical Thermal Resistance (Note2)	RθJA	50							°C/W
Junction Temperature Range	T_J	- 65 to + 175							°C
Storage Temperature Range	T_{STG}	- 65 to + 175							°C

Notes :

(1) Measured at 1.0 MHz and applied reverse voltage of 4.0V_{DC}

(2) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

UPDATE : MAY 27, 1998

RATING AND CHARACTERISTIC CURVES (BYW27-50 - BYW27-1000)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

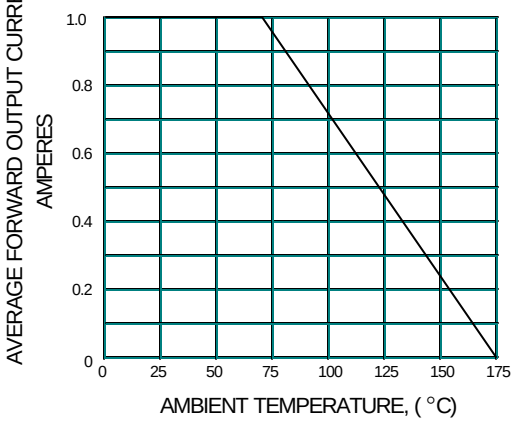


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

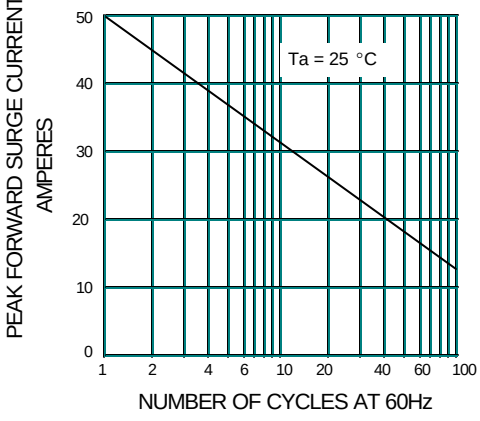


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

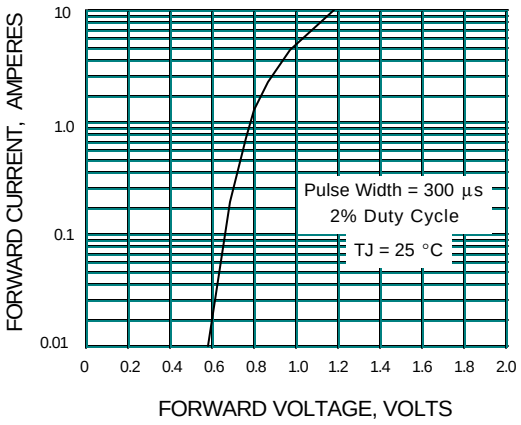
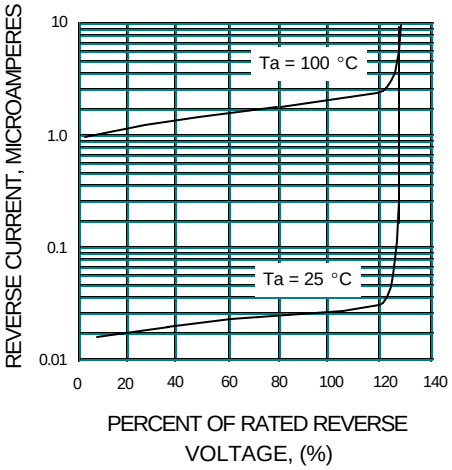


FIG.4 - TYPICAL REVERSE CHARACTERISTICS



littlediode
COMPONENTS FOR ALL

Littlediode supplies new, hard to find or obsolete electronic components and semiconductors all over the world.

With over two million different components listed you are sure to find the part you need.

Feel free to visit us today at our online store:

LittleDiode.com

Looking forward to providing you with the best possible service.