BY584

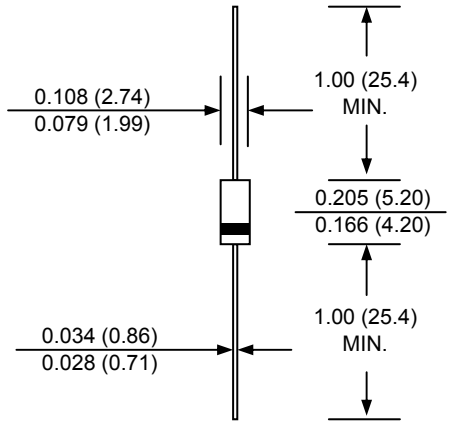
HIGH VOLTAGE SOFT-RECOVERY RECTIFIER DIODE

PRV : 1800 Volts
$I_{F(AV)}$: 100 mA

FEATURES :
* Glass passivated junction chip
* High current capability
* High surge current capability
* High reliability
* Low reverse current
* Low forward voltage drop
* Fast switching for high efficiency
* Pb / RoHS Free

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	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1800	V
Maximum Working Reverse Voltage	V_{RW}	1500	V
Maximum Non-Repetitive Peak Forward Voltage	V_{RSM}	1800	V
Maximum Average Forward Current (Note 1)	$I_{F(AV)}$	85	mA
Maximum Non-Repetitive Peak Forward Surge Current	I_{FSM}	5.0	A
Maximum Repetitive Peak Forward Current	I_{FRM}	800	mA
Maximum Forward Voltage at 100 mA , Tj=Tj max.	V_F	8.5	V
Maximum Reverse Current at Reverse Voltage	I_R	3.0	µA
Maximum Reverse Recovery Time (Note 2)	Trr	0.2	µs
Thermal Resistance - Junction to Ambient	$R_{\Theta JA}$	155	K / W
Junction Temperature Range	T_J	- 65 to + 120	°C
Storage Temperature Range	T_{STG}	- 65 to + 120	°C

Notes :

(1) Ttp = 25 °C, Lead Length 10 mm.

(2) Measured with I_F = 100 mA, to $V_R \geq 100V$

RATING AND CHARACTERISTIC CURVES (BY584)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC

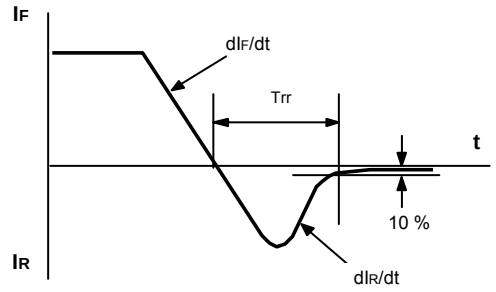


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

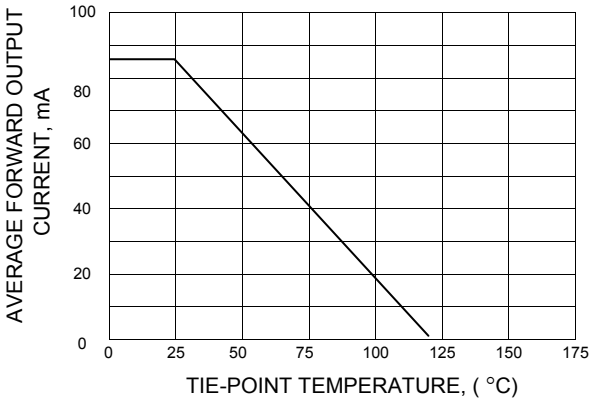


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

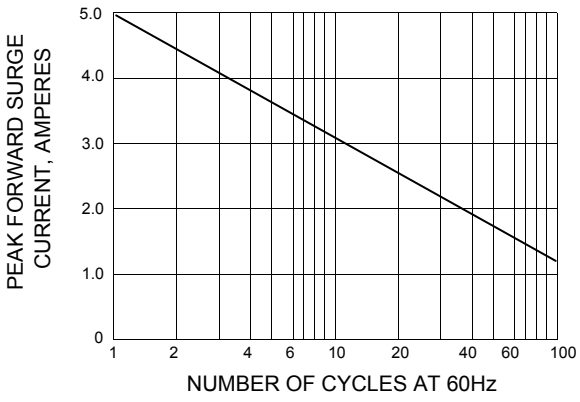


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

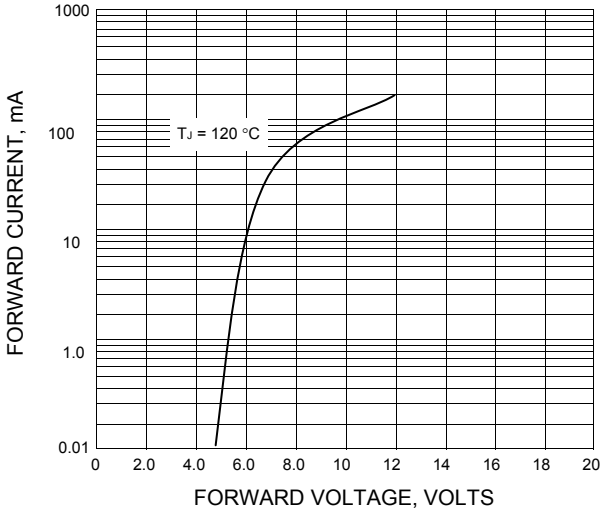


FIG.5 - TYPICAL REVERSE CHARACTERISTICS