

FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Parameter	Symbol	BYV95A	BYV95B	BYV95C	BYV96D	BYV96E	Units
Maximum recurrent peak reverse voltage	V_{RRM}	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	Volts
Minimum avalanche breakdown voltage @ 100 μ A	$V_{(BR)}$	300	500	700	900	1100	Volts
Maximum average forward rectified current 0.375" lead length at $T_A = 55^\circ\text{C}$	$I_{(AV)}$	1.5					Amps
Peak forward surge current, 10ms single half sine-wave superimposed on rated load @ $T_J = 165^\circ$	I_{FSM}	35.0					Amps
Maximum instantaneous forward voltage @1.5A $T_J = 25^\circ\text{C}$ $T_J = 165^\circ\text{C}$	V_F	1.6 1.35					Volts
Maximum full load reverse current full cycle average, 0.375" lead length at $T_J = 25^\circ\text{C}$ $T_J = 165^\circ\text{C}$	$I_{R(AV)}$	1.0 150.0					μ A
Maximum DC reverse current at rated DC blocking voltage	I_R	2.0					μ A
Maximum reverse recovery time ⁽¹⁾	t_{rr}	250			300		ns
Typical junction capacitance ⁽²⁾	C_J	10.0					pF
Typical thermal resistance ⁽³⁾	$R_{\theta JA}$	55.0					$^\circ\text{C}/\text{W}$
Operating junction temperature range	T_J	-65 to +175					$^\circ\text{C}$
Storage temperature range	T_{stg}	-65 to +200					$^\circ\text{C}$

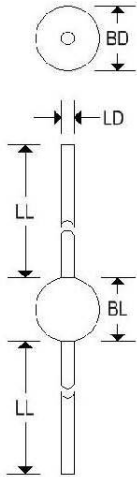
1. Measure with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Volts
3. Thermal resistance from junction to ambient at 0.375" lead length, PC board mounted

BYV95 SERIES BYV96 SERIES

FAST RECOVERY RECTIFIERS

MECHANICAL CHARACTERISTICS

Case	SOD-57
Marking	Body painted, alpha-numeric
Polarity	Cathode band



	SOD-57			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	-	0.142	-	3.600
BL	-	0.157	-	4.000
LD	-	0.032	-	0.820
LL	1.024	-	26.000	-

BYV95 SERIES BYV96 SERIES

FAST RECOVERY RECTIFIERS

FIG. 1 - FORWARD CURRENT DERATING CURVE

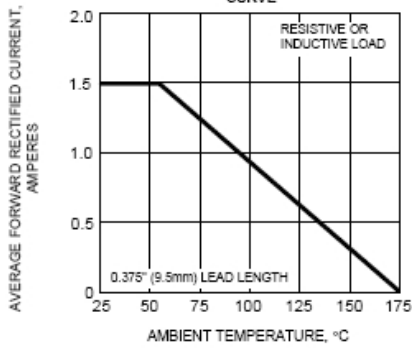


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

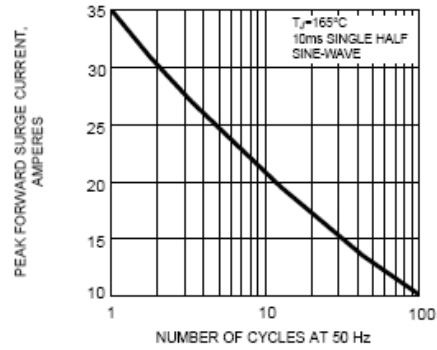


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

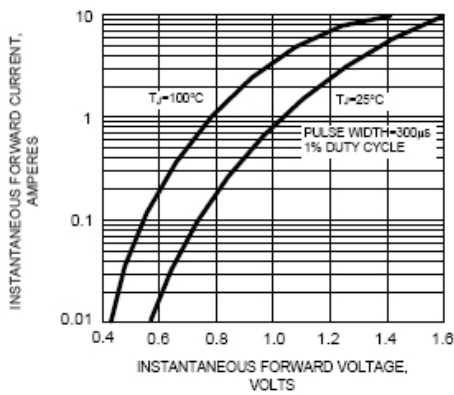


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

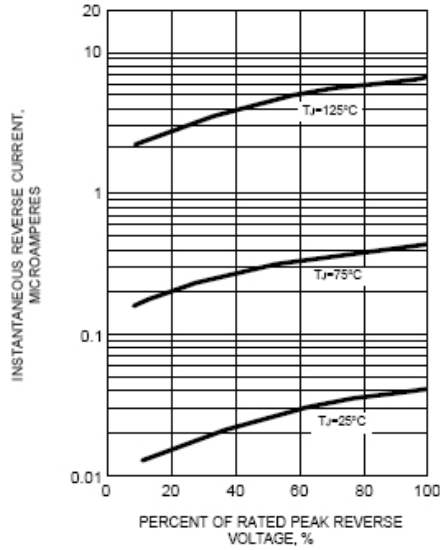


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

