



BYD57Z SERIES

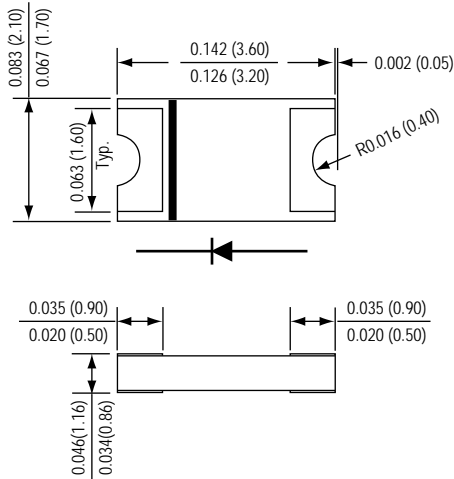
SURFACE MOUNT GLASS PASSIVATED JUNCTION HIGH EFFICIENT RECTIFIER

Reverse Voltage - 200 to 1000 Volts

Forward Current - 1.0 Ampere

PATENTED

1206



*Dimensions in inches and (millimeters)

SuperChipTM
SUPEREX IITM



* Equivalent to SOD87, GL1M , SOD123

FEATURES

- * Lead free product
- * Leadless chip form , no lead damage
- * Lead-free solder joint , no wire bond & lead frame
- * Low profile package
- * For surface mounted applications
- * Built-in strain relief
- * Low power loss , High efficiency
- * High current capability
- * High surge capacity
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0

MECHANICAL DATA

Case : Packed with FRP substrate and epoxy underfilled
Terminals : Pure Tin plated (Lead-Free), solderable per MIL-STD-750, Method 2026.
Polarity : Cathode Band, Laser marking
Weight : 0.012 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.		SYMBOLS	BYD57ZD	BYD57ZG	BYD57ZJ	BYD57ZK	BYD57ZM	UNITS
Maximum repetitive peak reverse voltage		VRRM	200	400	600	800	1000	Volts
Maximum RMS voltage		VRMS	140	280	420	560	700	Volts
Maximum DC blocking voltage		VDC	200	400	600	800	1000	Volts
Maximum average forward rectified current $T_L=110^{\circ}\text{C}$		I (AV)	1.0					Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load		IFSM	30		25			Amps
Maximum instantaneous forward voltage at 1.0 A		VF	1.7					Volts
Maximum DC reverse current at rated DC blocking voltage	$T_A=25^{\circ}\text{C}$ $T_A=125^{\circ}\text{C}$	IR	5 50					uA
Maximum reverse recovery time (NOTE 1)		trr	50		75			nS
Typical junction capacitance (NOTE 2)		CJ	10					pF
Operating junction and storage temperature range		TJ,TSTG	-65 to +175					°C

NOTES : (1) Reverse recovery test condition : IF 0.5A, IR=1.0A, Irr=0.25A
 (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
 (3) Preliminary draft.

RATINGS AND CHARACTERISTIC CURVES OF BYD57Z SERIES

FIG.1 - FORWARD CURRENT DERATING CURVE

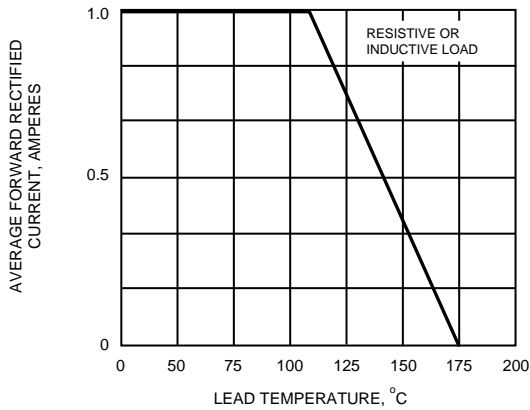


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

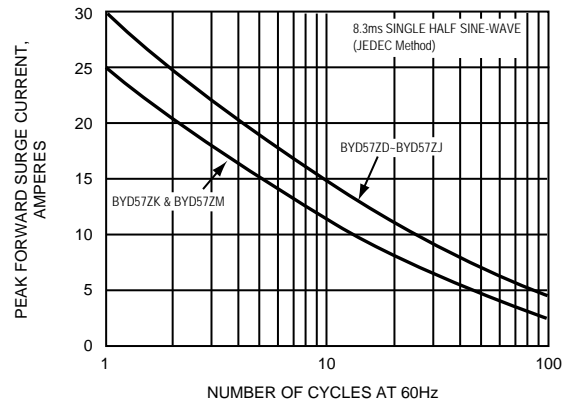


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

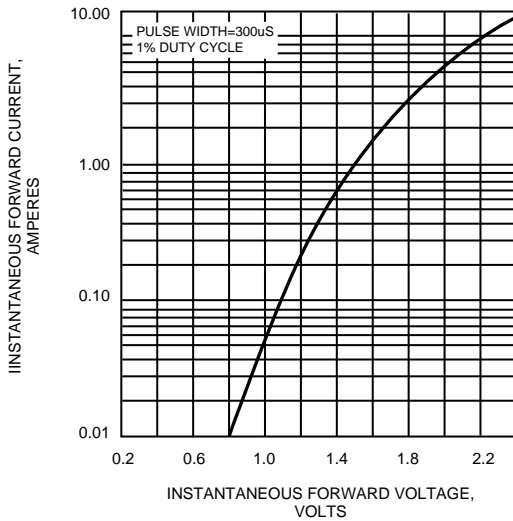


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

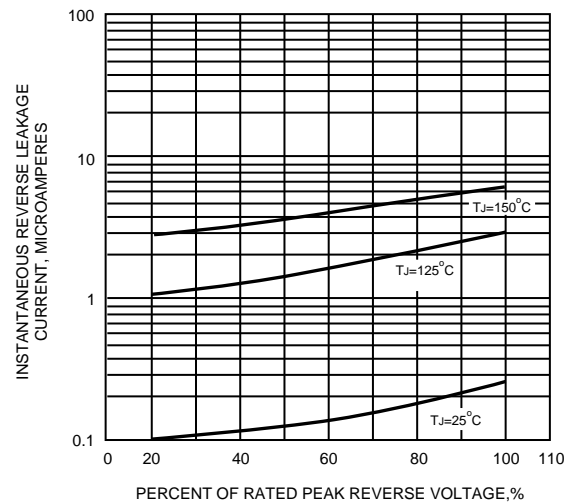


FIG.5 - TYPICAL JUNCTION CAPACITANCE

