

BYG10D THRU BYG10Y

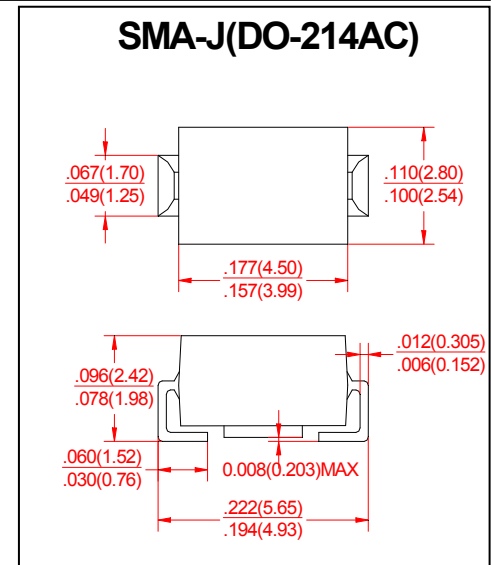
VOLTAGE RANGE 200 to 1600 Volts
CURRENT 1.5 Ampere

FEATURES

- For surface mounted applications
- Glass passivated junction
- Low profile package
- Built-in strain relief, ideal for automated placement
- Plastic package has underwrites laboratory flammability Classification 94V-0
- High temperature soldering guaranteed:
250°C/10 second at terminals

MECHANICAL DATA

- Case: JEDED SMA-J(DO-214AC) molded plastic
- Terminals: Plated axial lead solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SYMBOLS	BYG10D	BYG10G	BYG10J	BYG10K	BYG10M	BYG10Y	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	400	600	800	1000	1600	Volts
Maximum RMS Voltage	V_{RMS}	140	280	420	560	700	1120	Volts
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	1000	1600	Volts
Maximum Average Forward Rectified Current (see Fig. 1)	$I_{F(AV)}$	1.5						Amps
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method) $T_r=90^\circ C$	I_{FSM}	30						Amps
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.1						Volts
Maximum Instantaneous Forward Voltage at 1.5A		1.15						
Maximum DC Reverse Current at rated DC Blocking Voltage at	I_R	$T_A = 25^\circ C$ 5						μA
		$T_A = 125^\circ C$ 10						
Typical Junction Capacitance (NOTE 1)	$R_{\theta JA}$	150						$^\circ C/W$
	$R_{\theta JL}$	25						
Typical Thermal Resistance (NOTE 2)	t_{rr}	1500						nS
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150						$^\circ C$

Notes:

1. Thermal resistance from Junction to ambient and from junction to lead mounted on 0.2×0.2" (5.0 × 5.0mm) copper pad areas.
2. Reverse recovery test condition: $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$



WEET Technology Company Limited

General Purpose Rectifiers

BYG10D THRU BYG10Y

VOLTAGE RANGE 200 to 1600 Volts
CURRENT 1.5 Ampere

FIG.1-FORWARD CURRENT DERATING CURVE

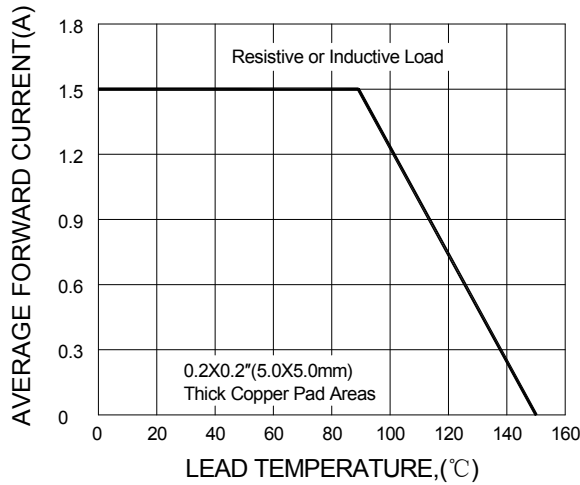


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

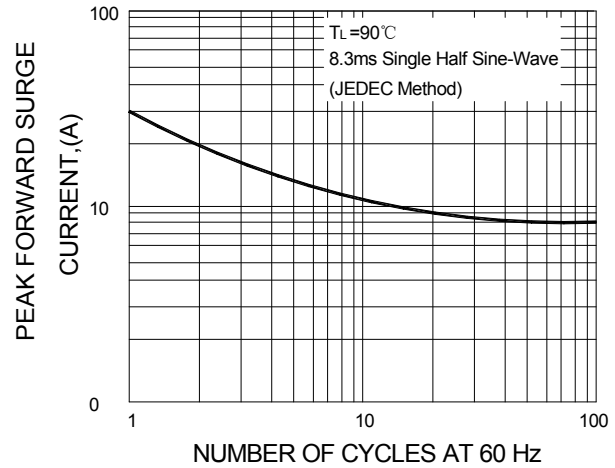


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

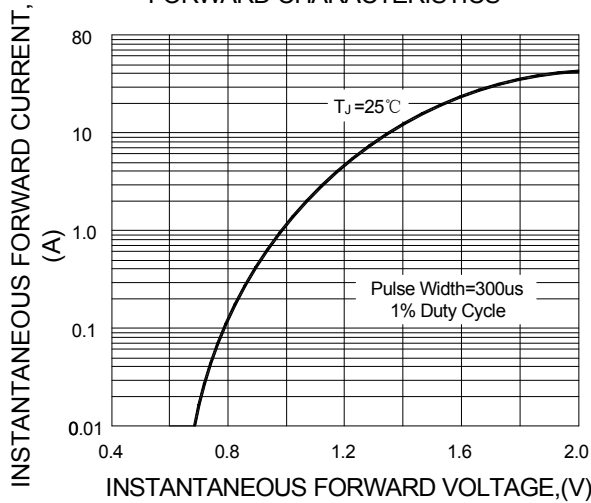


FIG.4-TYPICAL REVERSE CHARACTERISTICS

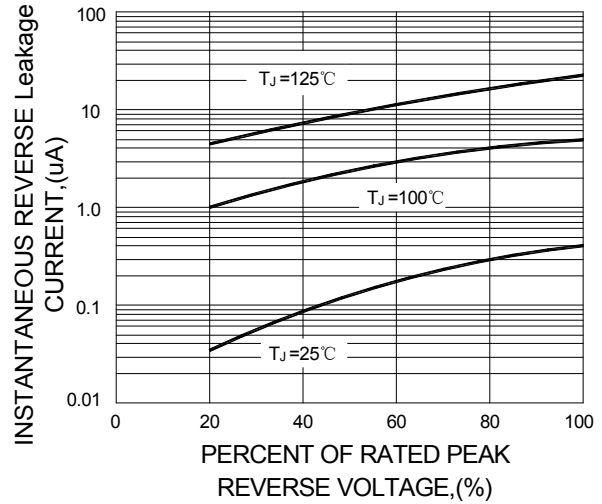


FIG.5-TYPICAL JUNCTION CAPACITANCE

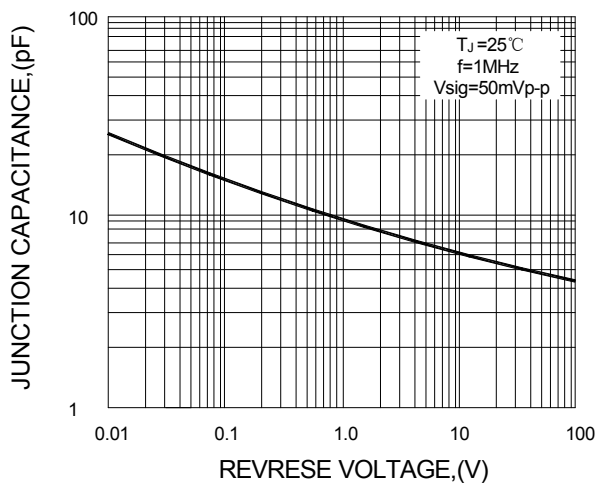
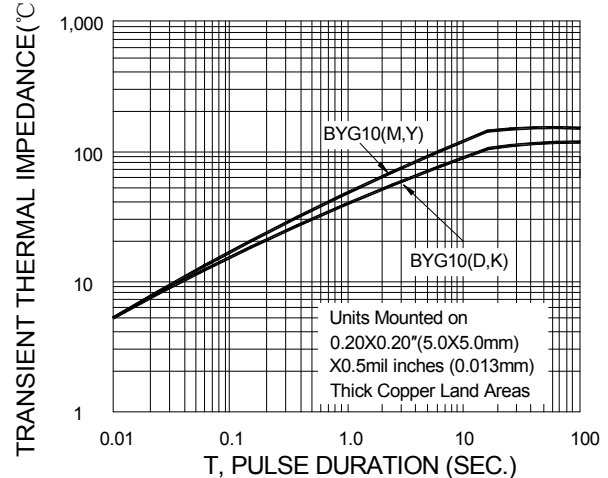


FIG.6-TRANSIENT THERMAL IMPEDANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.