

ST120 THRU ST1100

GW

1.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

FEATURES

- * The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- * Metal silicon junction, majority carrier conduction
- * Low power loss, high efficiency
- * High forward surge current capability

MECHANICAL DATA

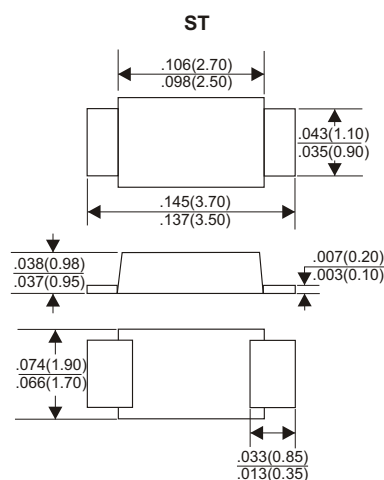
- * Case: Molded plastic body
- * Terminals: Solderable per MIL-STD-750, Method 2026
- * Polarity: Color band denotes cathode end
- * Mounting position: Any

VOLTAGE RANGE

20 to 100 Volts

CURRENT

1.0 Ampere



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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	ST120	ST130	ST140	ST150	ST160	ST180	ST1100	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V
Maximum RMS Voltage	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current at T _L =105°C	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	25							A
Maximum Instantaneous Forward Voltage at 1.0A	0.55		0.70		0.85			V
Maximum DC Reverse Current Ta=25°C	0.5					0.1		mA
at Rated DC Blocking Voltage Ta=100°C	10.0					5.0		mA
Typical Junction Capacitance (Note1)	110			80				pF
Typical Thermal Resistance RθJA (Note 2)	95							°C/W
Operating Temperature Range Tj	-55 — +125			-55 — +150				°C
Storage Temperature Range Tstg	-55 — +150							°C
Marking Code	Y12	Y13	Y14	Y15	Y16	Y18	Y1T	

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (ST120 THRU ST1100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

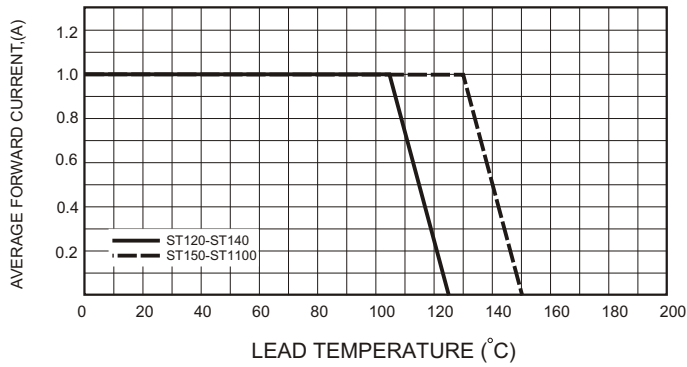


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

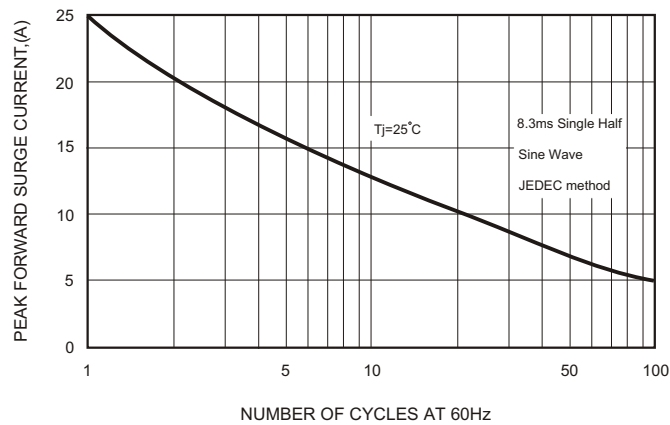


FIG.4-TYPICAL JUNCTION CAPACITANCE

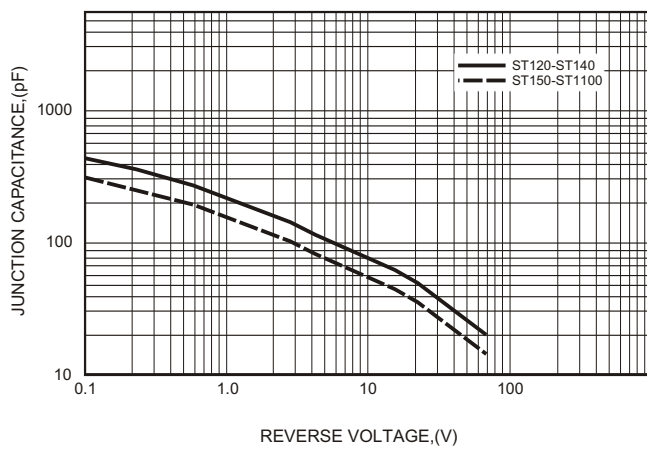


FIG.2-TYPICAL FORWARD CHARACTERISTICS

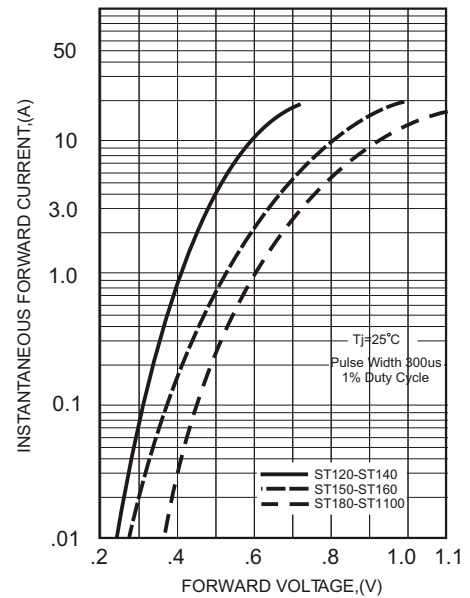


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

