

Ordering Information	
Part Number	Remark
ABS1xx	General
ABS1xx-H	Halogen Free

PRIMARY CHARACTERISTICS	
I_F	1A
V_{RRM}	20~200V
I_{FSM}	30A
V_F	0.52V, 0.66V, 0.83V, 0.87V, 0.90V
$T_J \text{ max}$	125°C , 150°C

ABS

Dimensions in inches and (millimeters)

Features

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead tin plated copper

Mechanical Date

- Case: ABS
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.092 grams (approximate)

MAXIMUM RATINGS (TA=25°C unless otherwise noted)												
PARAMETER	SYMBOL	ABS 120	ABS 130	ABS 140	ABS 150	ABS 160	ABS 180	ABS 1100	ABS 1150	ABS 1200	UNIT	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V	
Maximum average forward rectified current	I_F	1.0									A	
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0									A	
Maximum Instantaneous Forward Voltage IF=1A @ 25°C	V_F	0.52		0.66		0.83		0.87		0.90	V	
Maximum DC Reverse Current @ Tc=25°C at Rated DC Blocking Voltage @ Tc=100°C	I_R	0.5				0.2				5.0		mA
Typical Junction Capacitance(NOTE1)	C_j	90	70	60		50		35			pF	
Typical Thermal Resistance(NOTE2)	$R_{\theta Ja}$ $R_{\theta Jc}$	100						50				°C/W
Operating Temperature Range	T_J	-55 to +125					-55 to +150					°C
Storage Temperature Range	T_{STG}	-55 to +150										°C

NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC
2. Device mounted on FR-4 substrate, 1"×1", 2oz, single-sided, PC boards with 0.1"×0.15" copper pad.

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

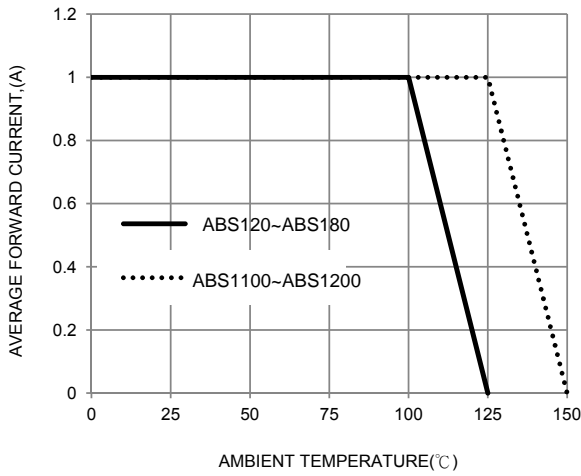


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

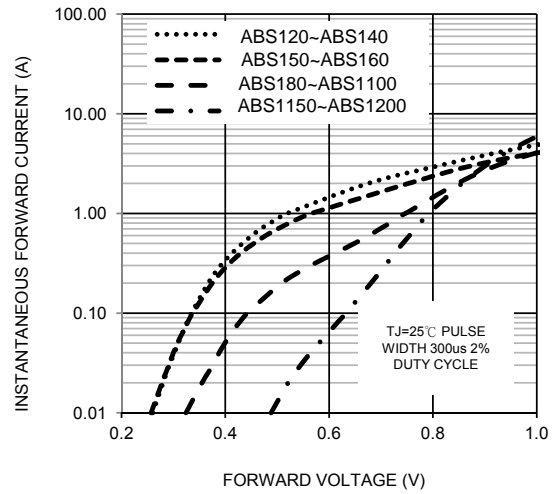


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

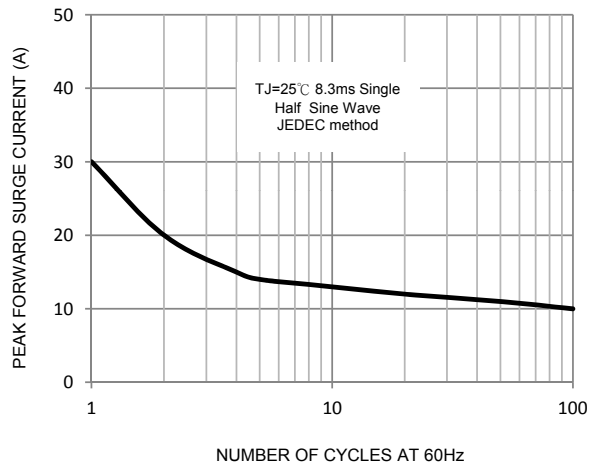


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

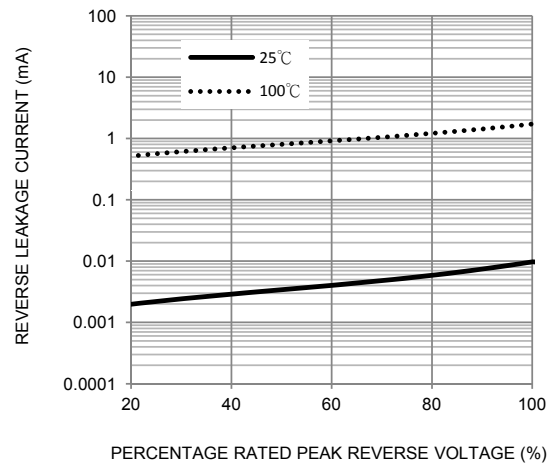


FIG. 5-TYPICAL JUNCTION CAPACITANCE

