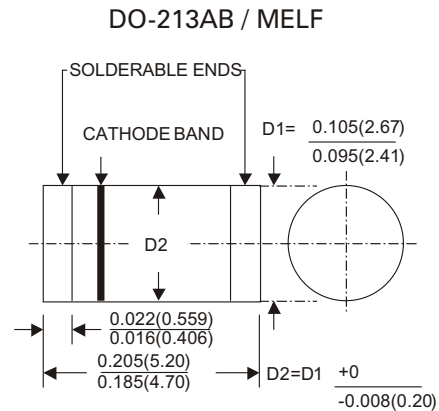


SGL41-20 thru SGL41-60

SURFACE MOUNT SCHOTTKY RECTIFIER



Dimension in inches (millimeters)

FEATURES

- Low power loss, high efficiency
- High current and surge capability
- Low forward voltage drop
- For use in low voltage, high frequency inverters, Free wheeling application
- Guarding for over voltage protection
- Metal silicon junction, majority carrier conduction
- High temperature soldering guaranteed : 250°C/10 seconds / 375° , (9.5mm) lead lengths

MECHANICAL DATA

Case : Molded plastic use UL94V-0 recognized flame retardant epoxy

Terminals : Plated terminals, solderable per MIL-STD-202, Method 208

Polarity : Blue Color band on body denotes cathode

Mounting position : Any

Weight : 0.1296 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	SGL 41-20	SGL 41-30	SGL 41-40	SGL 41-50	SGL 41-60	UNITS
Maximum Current Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current	$I_{(AV)}$	1.0					Amps
Peak Forward Surge Current Single Sine-Wave on Rated Load (JEDEC Method)	I_{FSM}	30					Amps
Maximum Instantaneous Forward Voltage Drop at 1.0A DC	V_F	0.5	0.55	0.6	0.7		Volts
Maximum DC Reverse Current $T_A=25^{\circ}C$ at Rated DC Blocking Voltage $T_A=100^{\circ}C$	I_R	0.5					mA
		10			5		
Typical Thermal Resistance	$R_{\theta JA}$	75					$^{\circ}C / W$
	$R_{\theta JL}$	30					
Typical Junction Capacitance	C_J	110			80		pF
Operating Junction and Storage Temperature Range	T_J T_{STG}	-55 to +125			-55 to +150		$^{\circ}C$

SGL41-20 thru SGL41-60

SURFACE MOUNT SCHOTTKY RECTIFIER

RATING AND CHARACTERISTICS CURVES SGL41-20 THRU SGL41-60

FIG. 1 – DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

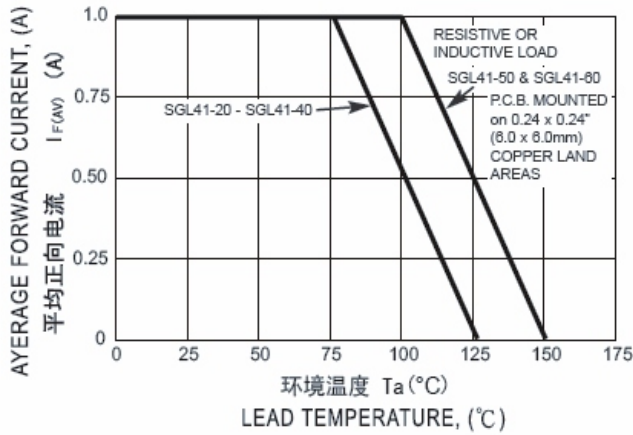


FIG. 2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

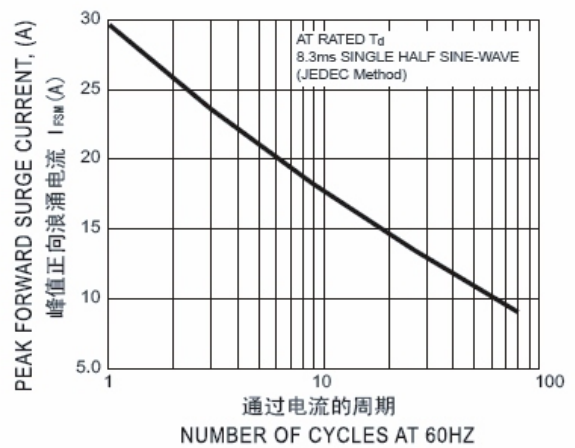


FIG. 3 – TYPICAL REVERSE CHARACTERISTICS

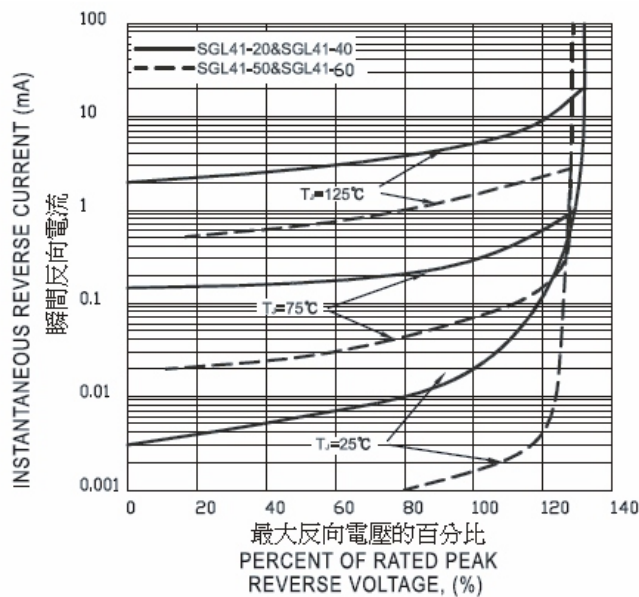


FIG. 4 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

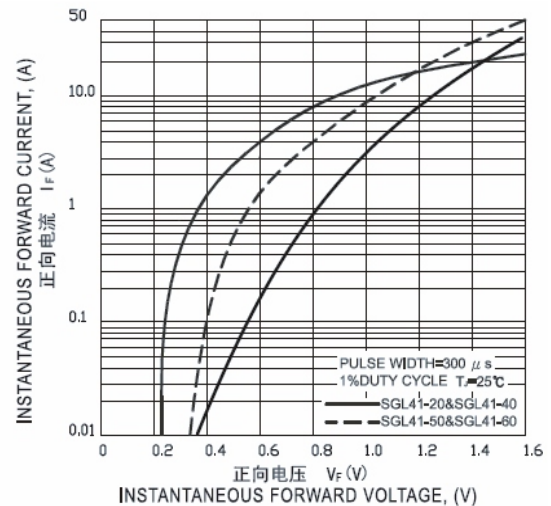


FIG. 5 – TYPICAL JUNCTION CAPACITANCE

