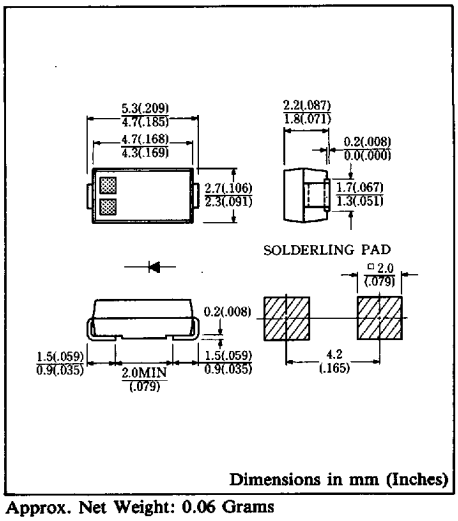
SCHOTTKY BARRIER DIODE 1.4A/30V EC15QS03L

FEATURES

- Miniature Size, Surface Mount Device
- Extremely Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capability
- 20 Volts through 100 Volts Types Available
- Packed in 12mm Tape and Reel
- Not Rolling During Assembly



Dimensions in mm (Inches)

Approx. Net Weight: 0.06 Grams

MAXIMUM RATINGS

Voltage Rating	Type / Symbol	EC15QS03L				Unit
Repetitive Peak Reverse Voltage	V_{RRM}	30				V
Electrical Rating	**Symbol**	**Condition**			**Rating**	**Unit**
Average Rectified Output Current (resistive load)	I_O	Ceramic substrate mounted *	180° rectangular wave conduction	$T_a = 12°C$	1.4	A
			180° sinusoidal wave conduction	$T_a = 25°C$	1.3	
		Glass-Epoxy substrate *		$T_a = 26°C$	0.9	
RMS Forward Current	$I_{F(RMS)}$				2.04	A
Peak One-cycle Forward Surge Current	I_{FSM}	50Hz half sine wave, non-repetitive			50	A
Operating Junction Temperature Range	T_{jw}				−40 to 125	°C
Storage Temperature Range	T_{stg}				−40 to 125	°C

ELECTRICAL & THERMAL CHARACTERISTICS

Characteristics	Symbol	Test Condition	Max.	Unit
Peak Forward Voltage	V_{FM}	$I_{FM} = 1.7A$ $T_j = 25°C$	0.45	V
Peak Reverse Current	I_{RM}	$V_{RM} = V_{RRM}$ $T_j = 25°C$	2.0	mA
Thermal Resistance, junction to ambient	$R_{th(j-a)}$	Ceramic substrate mounted*	108	°C/W
		Glass-Epoxy substrate mounted*	157	

*Substrate Soldering Land = 2 × 2mm

FIG.1-FORWARD CURRENT VS. VOLTAGE

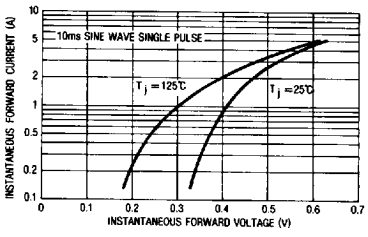


FIG.2-AVERAGE FORWARD POWER DISSIPATION

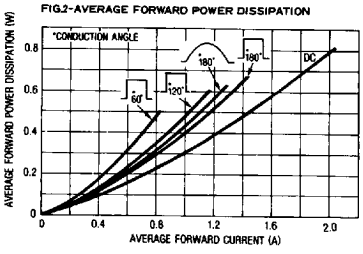


FIG.3-PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

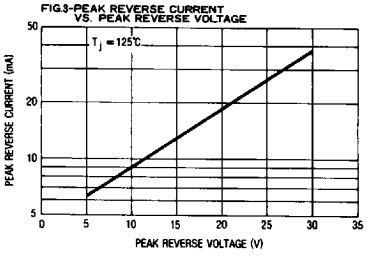


FIG.4-AVERAGE REVERSE POWER DISSIPATION

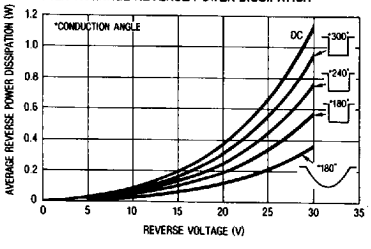


FIG.5-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

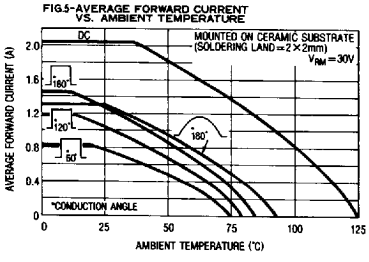


FIG.6-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

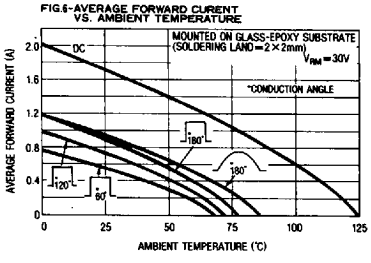


FIG.7-SURGE CURRENT RATINGS

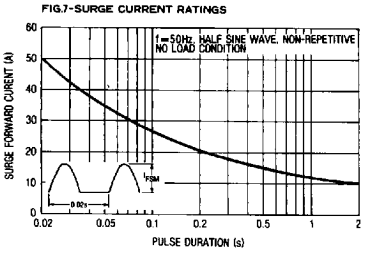
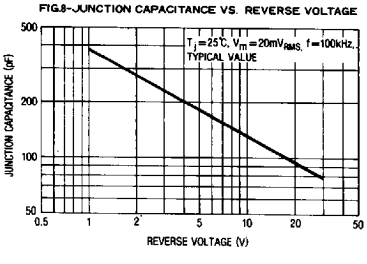


FIG.8-JUNCTION CAPACITANCE VS. REVERSE VOLTAGE



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