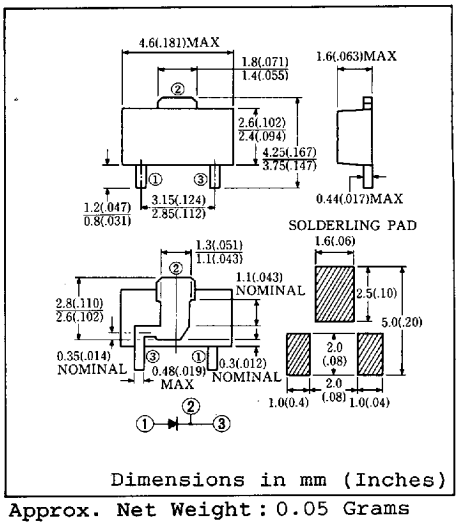
FEATURES

- Similar to TO-243AB (SOT-89) Case
- Surface Mount Device
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capability
- 30 Volts through 100 Volts Types Available
- Packaged in 12mm Tape and Reel



Dimensions in mm (Inches)

Approx. Net Weight : 0.05 Grams

MAXIMUM RATINGS

Voltage Rating	TYPE / Symbol	◆E10QS05	◆E10QS06	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	50	60	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	55	65	V

Electrical Rating	Symbol	Condition	Rating	Unit
Average Rectified Output Current	I_o	180° rectangular wave conduction P.C.Board mounted* T_a = 9°C	1.1	A
		180° sinusoidal wave conduction P.C.Board mounted* T_a = 26°C	1.0	
RMS Forward Current	$I_{F(RMS)}$		1.57	A
Peak One-cycle Forward Surge Current	I_{FSM}	50Hz half sine wave, non-repetitive	20	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} = 1.0A T_j = 25°C	0.58	V
Peak Reverse Current	I_{RM}	V_{RM} = V_{RRM} T_j = 25°C	1.0	mA
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient, P.C.B. mounted*	110	°C/W

*P.C.Board Print Land = 15x15mm

◆ For spare parts only

FIG.1-FORWARD VOLTAGE VS. FORWARD CURRENT

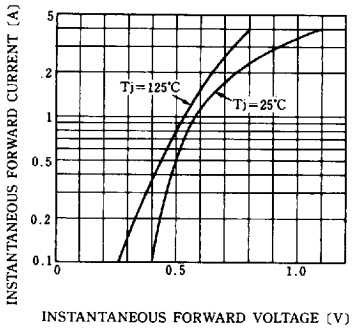


FIG.2-AVERAGE FORWARD POWER DISSIPATION

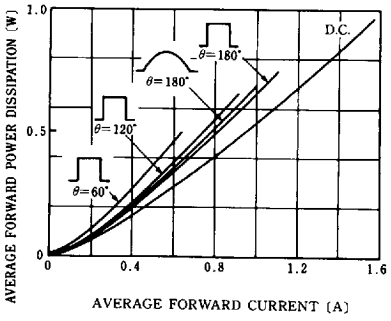


FIG.3-PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

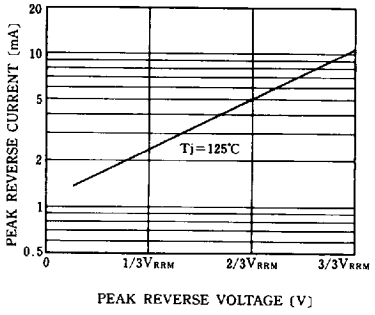


FIG.4-AVERAGE REVERSE POWER DISSIPATION (E10QS06) (E10QS05 IS FOR 83% RATED REVERSE POWER DISSIPATION)

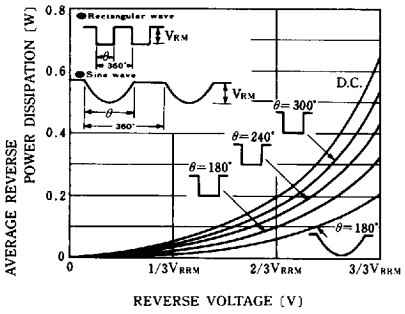


FIG.5-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

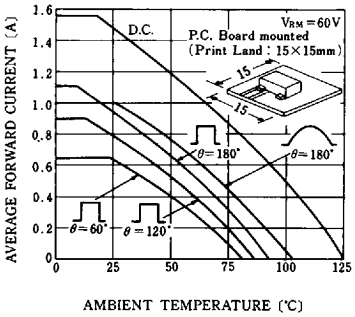


FIG.6-SURGE CURRENT RATINGS

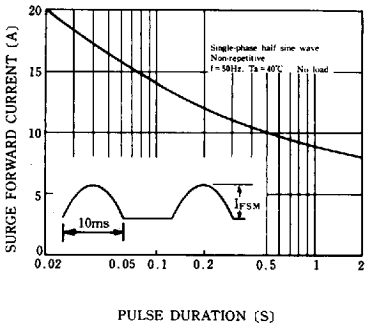


FIG.7-JUNCTION CAPACITANCE VS. REVERSE VOLTAGE