

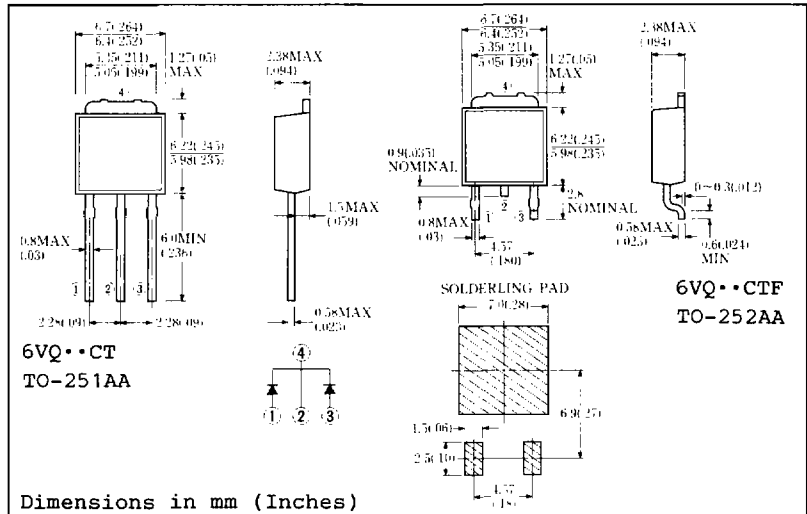
# SCHOTTKY BARRIER DIODE

6.6A/50~60V

6VQ05CT 6VQ06CT  
6VQ05CTF 6VQ06CTF

## FEATURES

- TO-251AA Case
- TO-252AA Case, Surface Mount Device
- Dual Diodes - Cathode Common
- Low Forward Voltage Drop
- Low Power Loss
- High Surge Capability
- 30 Volts thru 100 Volts Types Available
- Packaged in 16mm Tape and Reel (TO-252AA Case)



## MAXIMUM RATINGS

Voltage Rating	TYPE	◆ 6VQ05CT ◆ 6VQ05CTF	6VQ06CT 6VQ06CTF	Unit	
	Symbol				
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	$I_O$	Full rectangular wave conduction	$T_c = 92^\circ C$	6.6	A
		Full sinusoidal wave conduction	$T_c = 98^\circ C$	6.0	
			PCB mounted* $T_a = 25^\circ C$	1.3	
RMS Forward Current	$I_{F(RMS)}$			6.66	A
Peak One-cycle Forward Surge Current	$I_{FSM}$	50Hz full sine wave, non-repetitive		45	A
Operating Junction Temperature Range	$T_{jw}$			-40 to 125	$^\circ C$
Storage Temperature Range	$T_{stg}$			-40 to 125	$^\circ C$

## ELECTRICAL & THERMAL CHARACTERISTICS

Characteristics	Symbol	Test Condition	Max.	Unit
Peak Forward Voltage	$V_{FM}$	$I_{FM} = 3A$ $T_j = 25^\circ C$ per diode leg	0.58	V
Peak Reverse Current	$I_{RM}$	$V_{RM} = V_{RRM}$ $T_j = 25^\circ C$ per diode leg	3.0	mA
Thermal Resistance	$R_{th(j-a)}$	Junction to Ambient, P.C.B. mounted*	80	$^\circ C/W$
	$R_{th(j-c)}$	Junction to Case	5	

\* P.C.Board Print Land = 20x20mm

◆ For spare parts only

FIG.1-FORWARD VOLTAGE VS. FORWARD CURRENT

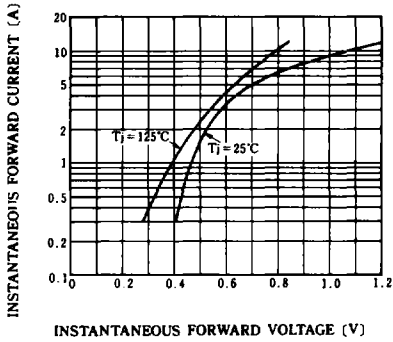


FIG.2-AVERAGE FORWARD POWER DISSIPATION

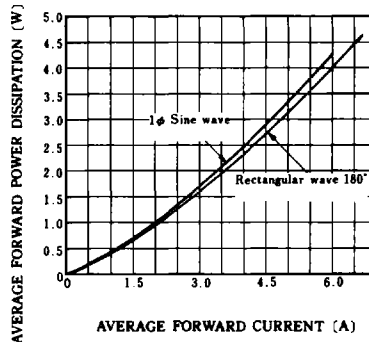


FIG.3-PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

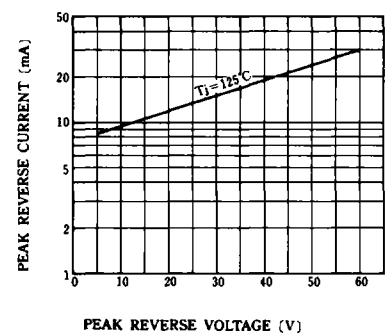


FIG.4-AVERAGE REVERSE POWER DISSIPATION

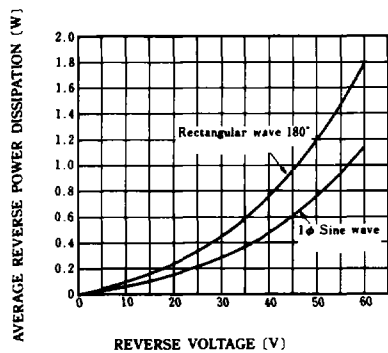


FIG.5-AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

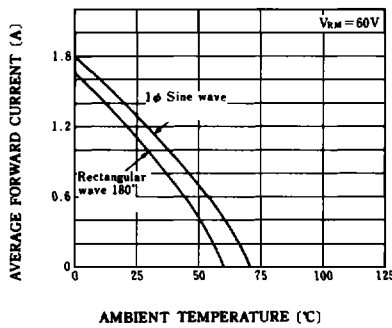


FIG.6-AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE

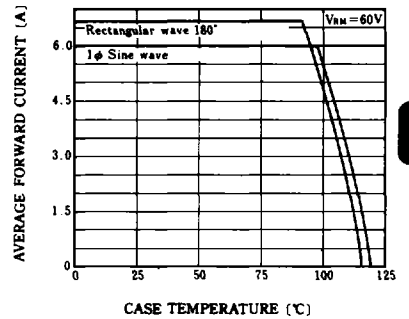


FIG.7-SURGE CURRENT RATINGS

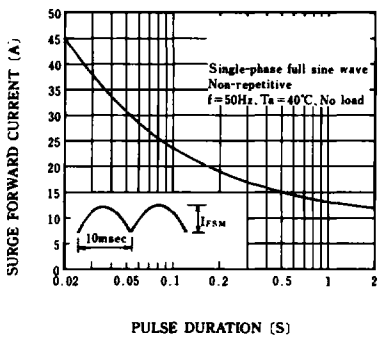


FIG.8-JUNCTION CAPACITANCE VS. REVERSE VOLTAGE

